

Server & Enterprise Software

BofA Cloud View: weaker Feb consumption backs soft guides; desktop not much better

Industry Overview

Consumption weakened in Feb; still a volatile environment

In the **cloud consumption group**, February data suggests that average consumption weakened in February after a slight recovery in January, with engaged visit growth of -0.7% y/y in February, versus -0.3% y/y in January. The m/m growth of -0.9% is below normal February seasonality of +0.7%, which is calculated as the trailing 3-yr m/m average. The February downtick is consistent with weaker CY24 outlook from a slew of consumption vendors (e.g., Snowflake, Datadog and MongoDB). Excluding AI workloads, consumption trends remain soft as firms evaluate new AI initiatives. See Exhibit 1.

Snowflake trends stable; Datadog continues to decel

In the cloud consumption group, we note that engaged visit for **Snowflake** (SNOW, Neutral) improved on a y/y basis (+4.2% y/y in February versus +2.8% y/y in January). However, February growth of +0.9% m/m is still below normal seasonality of +2% m/m, consistent with commentary backing the weaker FY25 outlook that soft consumption patterns are expected to sustain. **Datadog** (DDOG, Neutral) engaged visits y/y growth decelerated to -4/4% in February (versus -3.2% in January). The continued deceleration supports the company's conservative FY24 revenue guidance approach. See Exhibit 2.

Healthy desktop growth, tho trending below seasonality

In the **desktop group**, February engaged visit growth of +11.3% y/y accelerated from +10% y/y in January. However, m/m growth of -3.6% was weaker than normal February seasonality of -0.4%, which is calculated as the trailing 3-yr m/m average. The desktop group has more exposure to the SMB segment, which is still weighed down by a challenging demand environment (though largely stable). See Exhibit 15.

M365 accelerates, Adobe CC decels from strong level

In the desktop group, **Microsoft 365** (MSFT, Buy) accelerated the most in February, with engaged visit growth of +13.4% y/y, up from +3.9% y/y in January, suggesting perhaps easing subscriber pressure in the SMB segment, which was cited as a weakness on the Q2FY24 call. Engaged visit growth for **Adobe Creative Cloud** (ADBE, Buy) decelerated to +30.9% y/y in February, from a strong +39.7% y/y in January. Adobe Creative Cloud still represents the fastest grower in the desktop group. Relative strength is likely driven by top of funnel activity for Creative Cloud Express. See Exhibit 16.

Firefly peaks in July and has since reached stabilization

Engaged visits for the **Adobe Firefly** (ADBE, Buy) generative AI content tool peaked in July 2023 at 7.2 million, since the April 2023 launch. Activity improved in October 2023, around the release of Firefly 2.0 at 6.8 million. Usage gradually declined after, though has since reached stabilization at 4.4 million in February, consistent with January level.

See **Appendix for 1)** explanation of our methodology and **2)** correlations of Similarweb data to respective company's growth metrics.

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Timestamp: 10 March 2024 11:02PM EDT

10 March 2024

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Cloud consumption group = Datadog, MongoDB Atlas, and Snowflake

Desktop group = Adobe Creative Cloud and Firefly, Autodesk, Intuit QuickBooks and Mailchimp, and Microsoft 365

Cloud consumption vendors

In the **cloud consumption group**, February data suggests that average consumption weakened in February after a slight recovery in January, with engaged visit growth of -0.7% y/y in February, versus -0.3% y/y in January. The m/m growth of -0.9% was also below normal February seasonality of +0.7%, which is calculated as the trailing 3-yr m/m average. The February downtick is consistent with weaker CY24 outlook from a slew of consumption vendors (e.g., Snowflake, Datadog and MongoDB). Excluding AI workloads, consumption trends remain soft as firms evaluate new AI initiatives.

Exhibit 1: Similarweb total page view and engaged visit – cloud consumption vendor average*

As of Feb 2024, both total page view and engaged visit worsened on a y/y basis.

On a m/m basis, February data came in weaker compared to normal February seasonality (m/m seasonality)

Consumption Vendor Average	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Engaged Visit												
y/y %	1.4%	(1.0%)	4.9%	3.3%	0.4%	(4.9%)	(9.3%)	(2.5%)	1.8%	(3.6%)	(0.3%)	(0.7%)
m/m %	3.8%	(9.8%)	10.3%	2.0%	(3.8%)	3.8%	(6.6%)	6.0%	(2.3%)	(11.7%)	13.9%	(0.9%)
Trailing 3yr m/m average	7.8%	(6.5%)	4.6%	8.5%	(1.1%)	7.3%	(2.3%)	0.7%	(3.2%)	(6.1%)	10.4%	0.7%
Total Page View												
y/y %	(9.9%)	(16.4%)	(9.1%)	(9.5%)	(15.4%)	(11.7%)	(18.6%)	(13.2%)	(1.4%)	(4.4%)	6.1%	1.0%
m/m %	3.1%	(10.2%)	12.8%	4.4%	(6.4%)	7.5%	(11.1%)	4.6%	(2.0%)	(9.6%)	13.4%	1.2%
Trailing 3yr m/m average	8.7%	(5.4%)	2.9%	8.5%	2.0%	4.8%	(2.9%)	1.0%	(8.4%)	(5.9%)	9.2%	1.6%

Source: Similarweb

*1) For each metric, we calculate the average of the cloud consumption vendors (Datadog, MongoDB Atlas, and Snowflake);

2) m/m seasonality = average of m/m % in the trailing 2 years

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Exhibit 2: Similarweb total page view and engaged visit – cloud consumption vendors

Feb usage data suggests y/y growth remained largely pressured though has likely troughed in 1

	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Datadog												
Engaged Visit (millions)	2.4	2.2	2.5	2.6	2.4	2.5	2.3	2.4	2.3	2.0	2.3	2.2
y/y %	17.8%	17.7%	18.8%	16.3%	12.1%	5.7%	(4.4%)	(4.4%)	2.0%	(3.6%)	(3.2%)	(4.4%)
m/m %	5.1%	(7.5%)	10.2%	3.7%	(5.5%)	4.9%	(9.8%)	3.2%	(0.3%)	(13.1%)	10.8%	(2.6%)
Trailing 3yr m/m average	14.1%	(9.0%)	5.7%	7.5%	0.3%	9.9%	(1.2%)	5.9%	(1.1%)	(6.0%)	11.4%	(0.1%)
Total Page View (millions)	88	75	89	96	80	95	77	83	81	76	83	81
y/y %	7.3%	(7.4%)	(1.8%)	(8.4%)	(26.4%)	(11.2%)	(30.2%)	(22.6%)	(5.9%)	(8.8%)	8.4%	(1.8%)
m/m %	7.2%	(14.6%)	18.3%	7.6%	(17.0%)	19.2%	(19.2%)	8.4%	(2.5%)	(6.4%)	8.9%	(2.2%)
Trailing 3yr m/m average	8.0%	(6.8%)	4.0%	10.7%	9.4%	4.5%	(1.4%)	1.1%	(8.6%)	1.9%	6.5%	2.9%
MongoDB Atlas*												
Engaged Visit (millions)	5,583	5,529	5,576	5,596	5,550	5,559	5,518	5,540	5,517	5,478	5,560	5,506
y/y %	(2.6%)	(1.9%)	(1.5%)	(0.3%)	(0.5%)	(0.5%)	(0.8%)	0.0%	(1.1%)	(0.6%)	(0.6%)	(1.8%)
m/m %	(0.5%)	(1.0%)	0.9%	0.4%	(0.8%)	0.2%	(0.7%)	0.4%	(0.4%)	(0.7%)	1.5%	(0.8%)
Trailing 3yr m/m average	(0.9%)	(1.1%)	0.8%	0.4%	(1.3%)	0.3%	(0.2%)	(0.9%)	1.1%	(1.1%)	0.6%	0.2%
Total Page Views (millions)	66,129	65,740	66,963	66,922	66,775	66,475	66,054	66,337	66,315	65,392	66,245	65,944
y/y %	(6.6%)	(6.1%)	(4.8%)	(4.0%)	(2.3%)	(3.1%)	(2.9%)	(2.3%)	(2.0%)	0.9%	0.4%	(0.4%)
m/m %	(0.2%)	(0.6%)	1.9%	(0.1%)	(0.2%)	(0.4%)	(0.6%)	0.4%	(0.0%)	(1.4%)	1.3%	(0.3%)
Trailing 3yr m/m average	(0.3%)	(1.0%)	1.0%	0.2%	(1.8%)	0.3%	(0.8%)	(0.8%)	0.6%	(2.7%)	1.4%	0.4%
Snowflake												
Engaged Visit (thousands)	908	718	861	877	832	886	804	921	863	679	878	886
y/y %	(11.1%)	(18.6%)	(2.6%)	(5.9%)	(10.4%)	(20.1%)	(22.6%)	(3.1%)	4.5%	(6.7%)	2.8%	4.2%
m/m %	6.8%	(20.9%)	20.0%	1.9%	(5.1%)	6.4%	(9.2%)	14.5%	(6.3%)	(21.4%)	29.4%	0.9%
Trailing 3yr m/m average	10.0%	(9.3%)	7.4%	17.7%	(2.3%)	11.8%	(5.4%)	(3.0%)	(9.7%)	(11.3%)	19.2%	2.0%
Total Page View (millions)	4.5	3.8	4.5	4.8	4.7	4.8	4.2	4.4	4.3	3.4	4.4	4.6
y/y %	(30.4%)	(35.6%)	(20.5%)	(16.2%)	(17.7%)	(20.9%)	(22.9%)	(14.7%)	3.8%	(5.4%)	9.6%	5.3%
m/m %	2.2%	(15.3%)	18.3%	5.6%	(1.9%)	3.7%	(13.4%)	4.9%	(3.4%)	(20.8%)	29.9%	6.2%
Trailing 3yr m/m average	18.4%	(8.4%)	3.7%	14.6%	(1.7%)	9.8%	(6.5%)	2.7%	(17.2%)	(16.8%)	19.5%	1.4%

Source: Similarweb

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Datadog

Per Similarweb, as of February 2024, Datadog monthly **engaged visit** was 2.2 million. February growth of -4.4% y/y was worse than the -3.2% y/y in January 2024. February growth of -2.6% m/m represents a downtick from +10.8% m/m in January 2024. We note that the sequential m/m growth is also weaker than normal February seasonality (-0.1% m/m).

Exhibit 3: Similarweb Datadog monthly engaged visit – trailing 12 months

As of Feb 2024, monthly engaged visit was 2.2 million, -4.4% y/y, -2.6% m/m

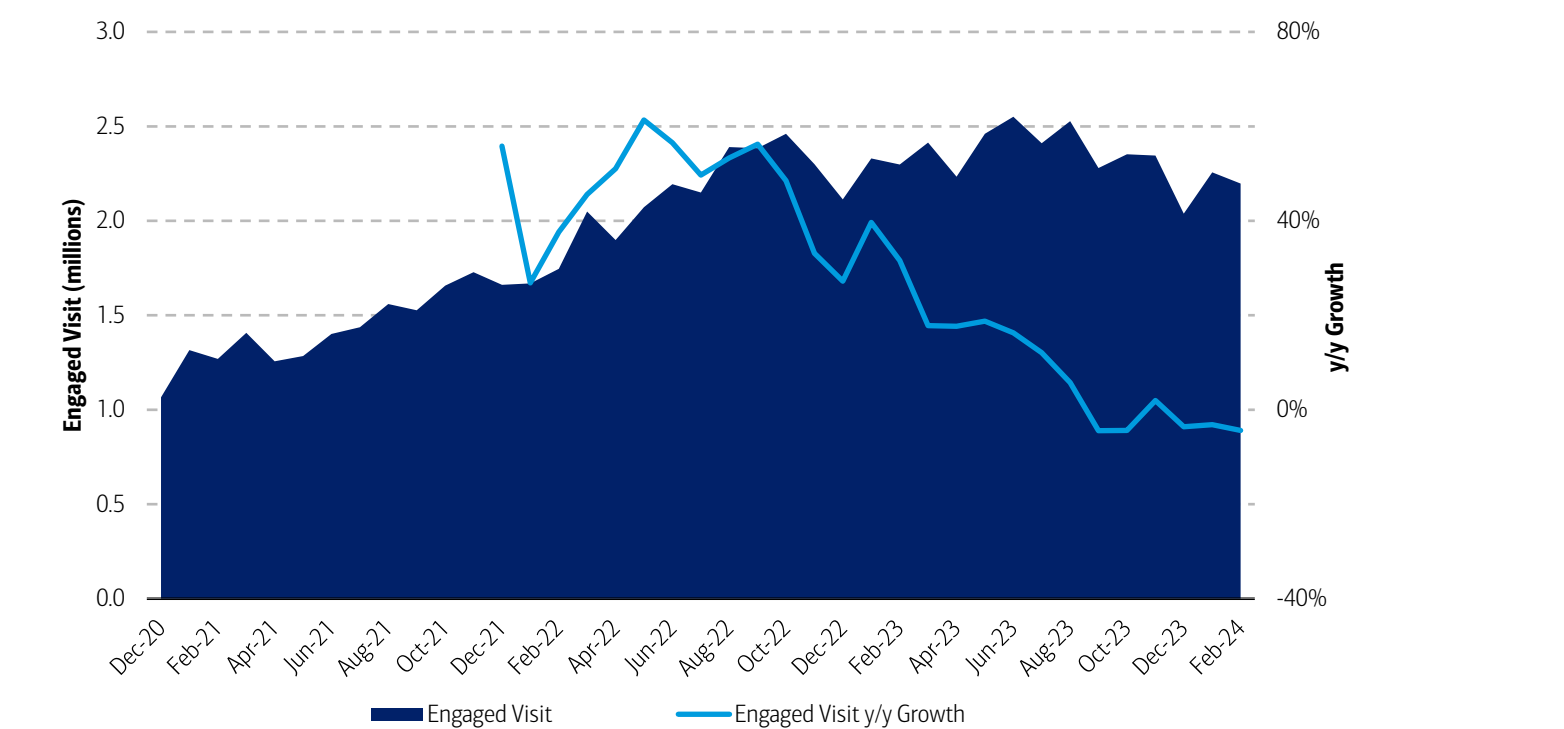
Datadog	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Engaged Visit (millions)	2.4	2.2	2.5	2.6	2.4	2.5	2.3	2.4	2.3	2.0	2.3	2.2
y/y %	17.8%	17.7%	18.8%	16.3%	12.1%	5.7%	(4.4%)	(4.4%)	2.0%	(3.6%)	(3.2%)	(4.4%)
m/m %	5.1%	(7.5%)	10.2%	3.7%	(5.5%)	4.9%	(9.8%)	3.2%	(0.3%)	(13.1%)	10.8%	(2.6%)
Trailing 3yr m/m average	14.1%	(9.0%)	5.7%	7.5%	0.3%	9.9%	(1.2%)	5.9%	(1.1%)	(6.0%)	11.4%	(0.1%)

Source: Similarweb

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Exhibit 4: Similarweb Datadog monthly engaged visit – Dec 20 to Feb 24

Growth has decelerated significantly since the peak in mid-2022 though has since stabilized, suggesting trough might be in sight



Source: Similarweb

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Per Similarweb, as of February 2024, Datadog monthly **total page view** was 81 million. February growth of -1.8% y/y was worse than the +8.4% y/y in January 2024. February growth of -2.2% m/m worsened from +8.9% m/m in January 2024. We note that the sequential m/m growth is also weaker than the normal February seasonality (+2.9% m/m).

Exhibit 5: Similarweb Datadog monthly total page view – trailing 12 months

As of Feb 2024, monthly total page view was 81 million, -1.8% y/y, -2.2% m/m

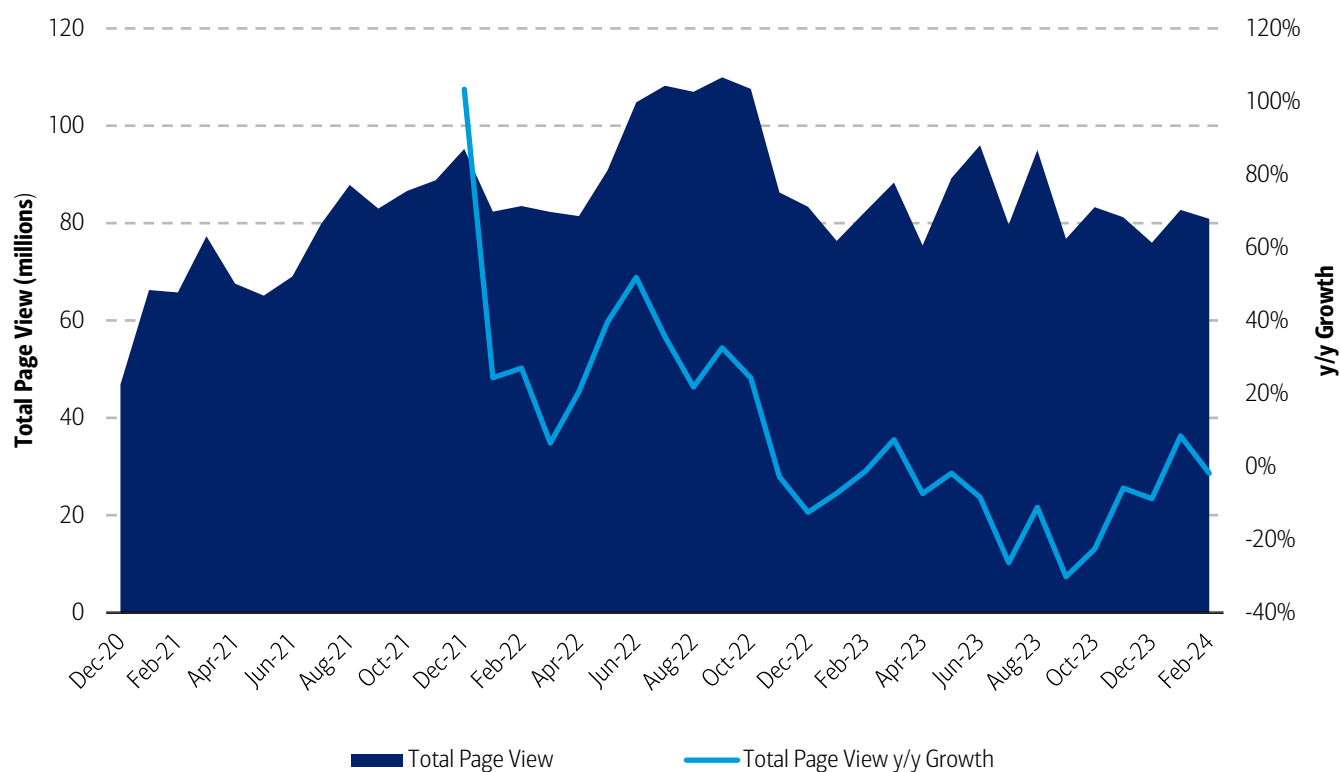
Datadog	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Total Page View (millions)	88	75	89	96	80	95	77	83	81	76	83	81
y/y %	7.3%	(7.4%)	(1.8%)	(8.4%)	(26.4%)	(11.2%)	(30.2%)	(22.6%)	(5.9%)	(8.8%)	8.4%	(1.8%)
m/m %	7.2%	(14.6%)	18.3%	7.6%	(17.0%)	19.2%	(19.2%)	8.4%	(2.5%)	(6.4%)	8.9%	(2.2%)
Trailing 3yr m/m average	8.0%	(6.8%)	4.0%	10.7%	9.4%	4.5%	(1.4%)	1.1%	(8.6%)	1.9%	6.5%	2.9%

Source: Similarweb

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Exhibit 6: Similarweb Datadog monthly total page view – Dec 20 to Feb 24

Growth has decelerated significantly since the most recent peak in mid-2022 though has since started to consistently reaccelerate, suggesting September 2023 might be the trough



Source: Similarweb

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MongoDB

For **MongoDB Atlas** (Mongo's key cloud offering), a majority of the users run workloads via a command line interface (CLI) instead of the web-based interface, which makes the web traffic data of Atlas login page less meaningful for inference. Instead, we leverage the *Similarweb Web Market Analysis*. This data represents the end-user engagement with websites/applications across a comprehensive list of industries. Given that MongoDB Atlas' consumption revenue is closely tied to end-user activity of the underlying website/application market, we believe this data is a better directional indicator for Atlas' consumption revenue.

On a 30-day moving average basis, daily **engaged visit** was 5.5 billion in February 2024. February growth of -1.8% y/y represents a deceleration from -0.6% y/y in January 2024. February growth of -0.8% m/m weakened from +1.5% m/m in January 2024. We note that the sequential m/m growth is also weaker than the normal February seasonality (+0.2% m/m).

Exhibit 7: Similarweb Web Market Analysis daily engaged visit – trailing 30-day average (Mar 23 to Feb 24)

As of Feb 2024, daily engaged visit was 5.5 billion, -1.8% y/y, -0.8% m/m

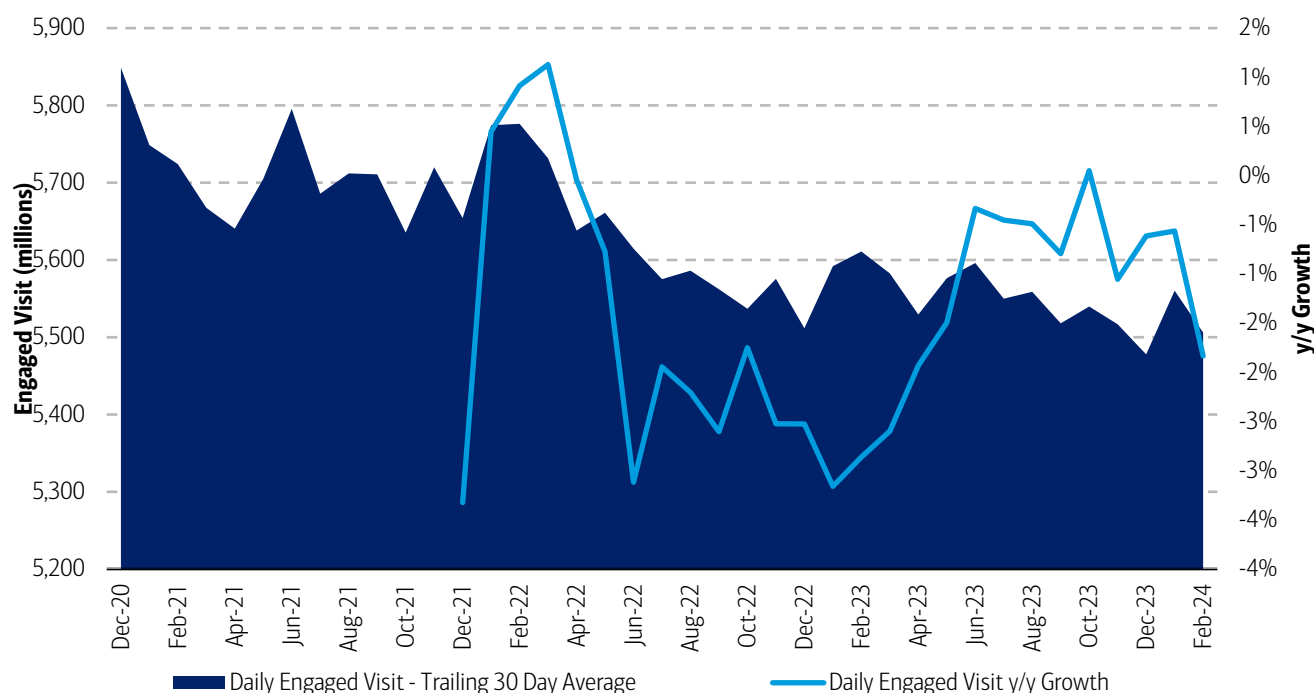
Application Market	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Engaged Visit (millions)	5,583	5,529	5,576	5,596	5,550	5,559	5,518	5,540	5,517	5,478	5,560	5,506
y/y %	(2.6%)	(1.9%)	(1.5%)	(0.3%)	(0.5%)	(0.5%)	(0.8%)	0.0%	(1.1%)	(0.6%)	(0.6%)	(1.8%)
m/m %	(0.5%)	(1.0%)	0.9%	0.4%	(0.8%)	0.2%	(0.7%)	0.4%	(0.4%)	(0.7%)	1.5%	(0.8%)
Trailing 3yr m/m average	(0.9%)	(1.1%)	0.8%	0.4%	(1.3%)	0.3%	(0.2%)	(0.9%)	1.1%	(1.1%)	0.6%	0.2%

Source: Similarweb

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Exhibit 8: Similarweb Web Market Analysis daily engaged visit – trailing 30-day average (Dec 20 to Feb 24)

Growth has troughed in early 2023 and has since been gradually recovering though has recently been somewhat volatile



Source: Similarweb

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On a 30-day moving average basis, daily **total page view** was 66 billion in February 2024. February growth of -0.4% y/y represents a deceleration from +0.4% y/y in January 2024. February growth of -0.3% m/m weakened from +1.3% m/m in January 2024. The sequential growth is lower than normal February seasonality (+0.4% m/m).

Exhibit 9: Similarweb Web Market Analysis daily total page view – trailing 30-day average (Mar 23 to Feb 24)

As of Feb 2024, daily total page view was 65.9 trillion, -0.4% y/y, +0.3% m/m

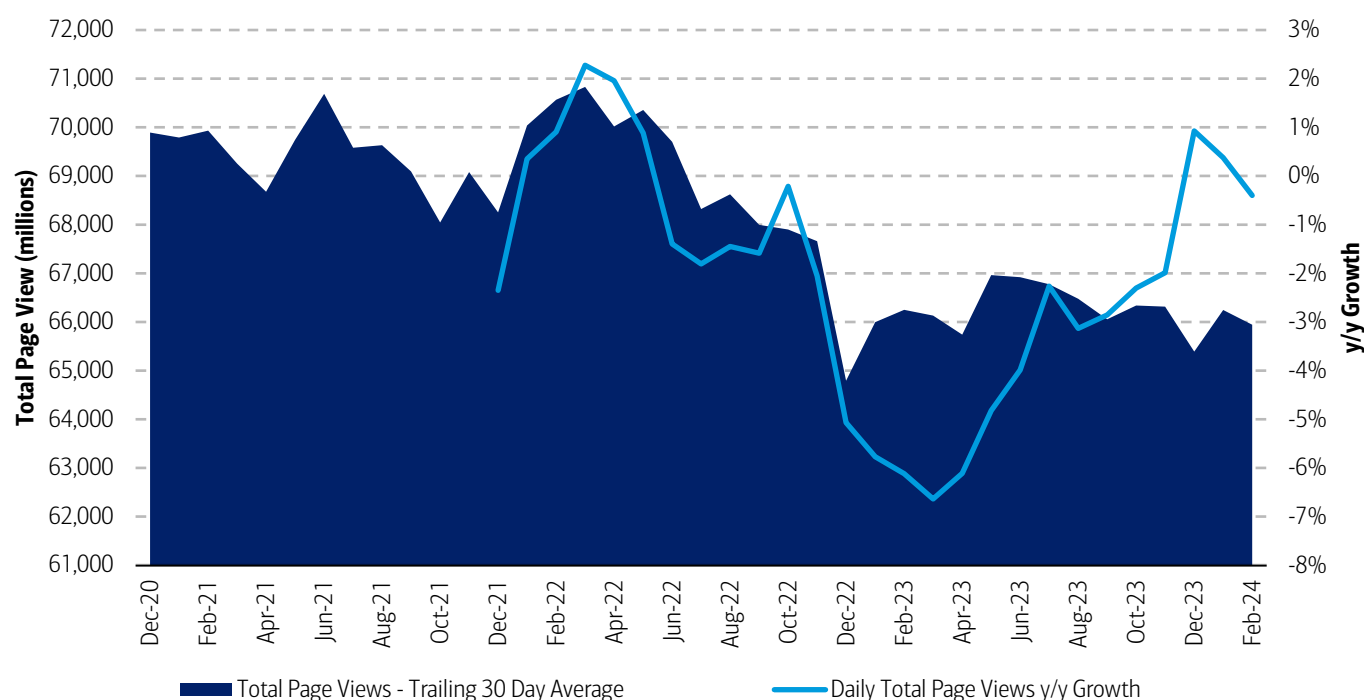
Application Market	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Total Page Views (millions)	66,129	65,740	66,963	66,922	66,775	66,475	66,054	66,337	66,315	65,392	66,245	65,944
y/y %	(6.6%)	(6.1%)	(4.8%)	(4.0%)	(2.3%)	(3.1%)	(2.9%)	(2.3%)	(2.0%)	0.9%	0.4%	(0.4%)
m/m %	(0.2%)	(0.6%)	1.9%	(0.1%)	(0.2%)	(0.4%)	(0.6%)	0.4%	(0.0%)	(1.4%)	1.3%	(0.3%)
Trailing 3yr m/m average	(0.3%)	(1.0%)	1.0%	0.2%	(1.8%)	0.3%	(0.8%)	(0.8%)	0.6%	(2.7%)	1.4%	0.4%

Source: Similarweb

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Exhibit 10: Similarweb Web Market Analysis daily total page view – trailing 30-day average (Dec 20 to Feb 24)

Growth has troughed in early 2023 and has since been gradually recovering though has recently been reversing down



Source: Similarweb

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Snowflake

Per Similarweb, as of February 2024, Snowflake monthly **engaged visit** was 886K. February growth of +4.2% y/y represents an acceleration from +2.8% y/y in January 2024. February growth of +0.9% m/m continues to recover from the strong +29.4% m/m in January 2024, though the sequential m/m growth is weaker than normal February seasonality (+2% m/m).

Exhibit 11: Similarweb Snowflake monthly engaged visit – trailing 12 months

As of Feb 2024, monthly engaged visit was 886 million, +4.2% y/y, +0.9% m/m

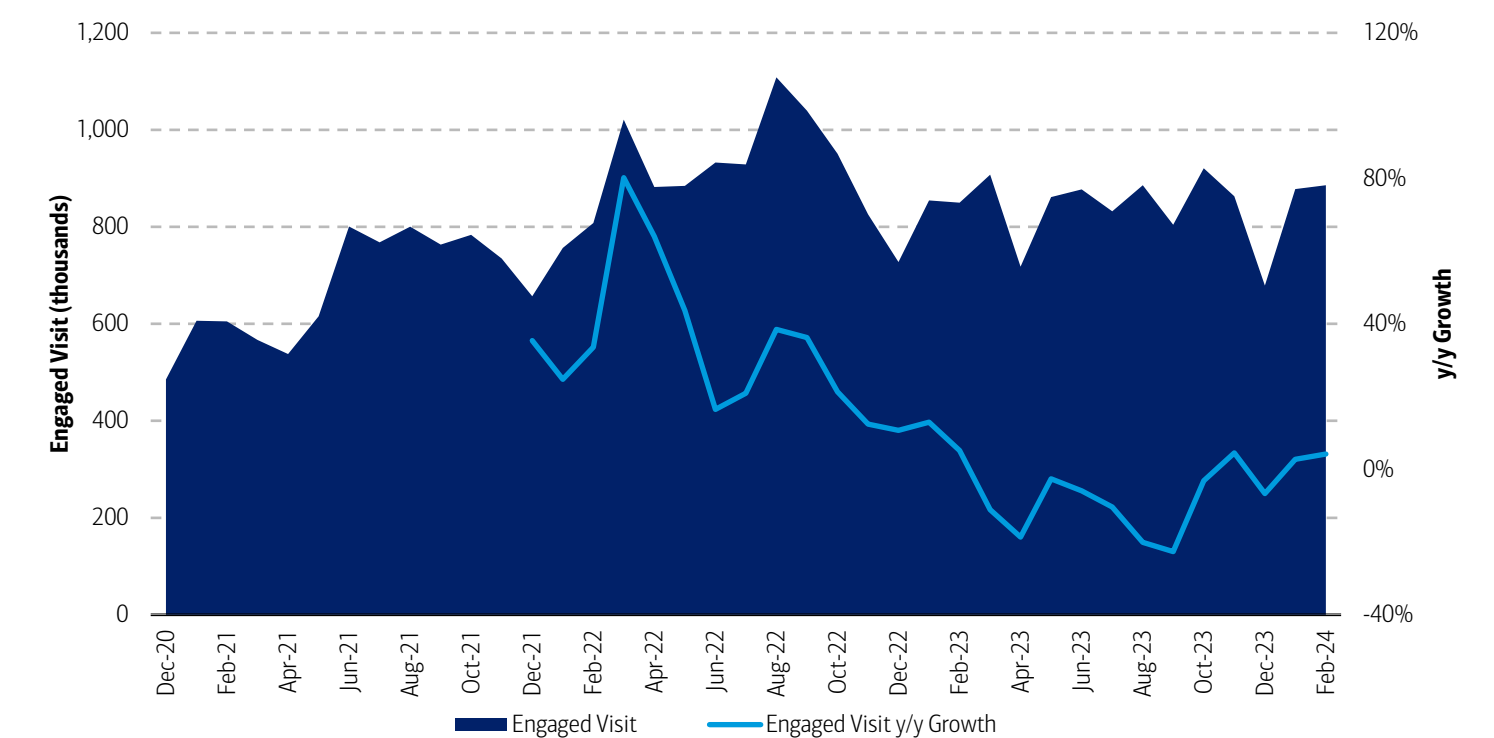
Snowflake	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Engaged Visit (thousands)	908	718	861	877	832	886	804	921	863	679	878	886
y/y %	(11.1%)	(18.6%)	(2.6%)	(5.9%)	(10.4%)	(20.1%)	(22.6%)	(3.1%)	4.5%	(6.7%)	2.8%	4.2%
m/m %	6.8%	(20.9%)	20.0%	1.9%	(5.1%)	6.4%	(9.2%)	14.5%	(6.3%)	(21.4%)	29.4%	0.9%
Trailing 3yr m/m average	10.0%	(9.3%)	7.4%	17.7%	(2.3%)	11.8%	(5.4%)	(3.0%)	(9.7%)	(11.3%)	19.2%	2.0%

Source: Similarweb

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Exhibit 12: Similarweb Snowflake monthly engaged visit – Dec 20 to Feb 24

Growth has likely troughed in April 2023 after decelerating significantly post peak level in March 2022



Source: Similarweb

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Per Similarweb, as of February 2024, Snowflake monthly **total page view** was 4.6 million. February growth of +5.3% y/y represents a deceleration from +9.6% y/y in January 2024. February growth of +6.2% m/m weakened from the 29.9% m/m in January 2024, though we note that the sequential m/m growth is stronger than the normal February seasonality (+1.4% m/m).

Exhibit 13: Similarweb Snowflake monthly total page view – trailing 12 months

As of Feb 2024, monthly total page view was 4.6 million, +9.6% y/y, +6.2% m/m

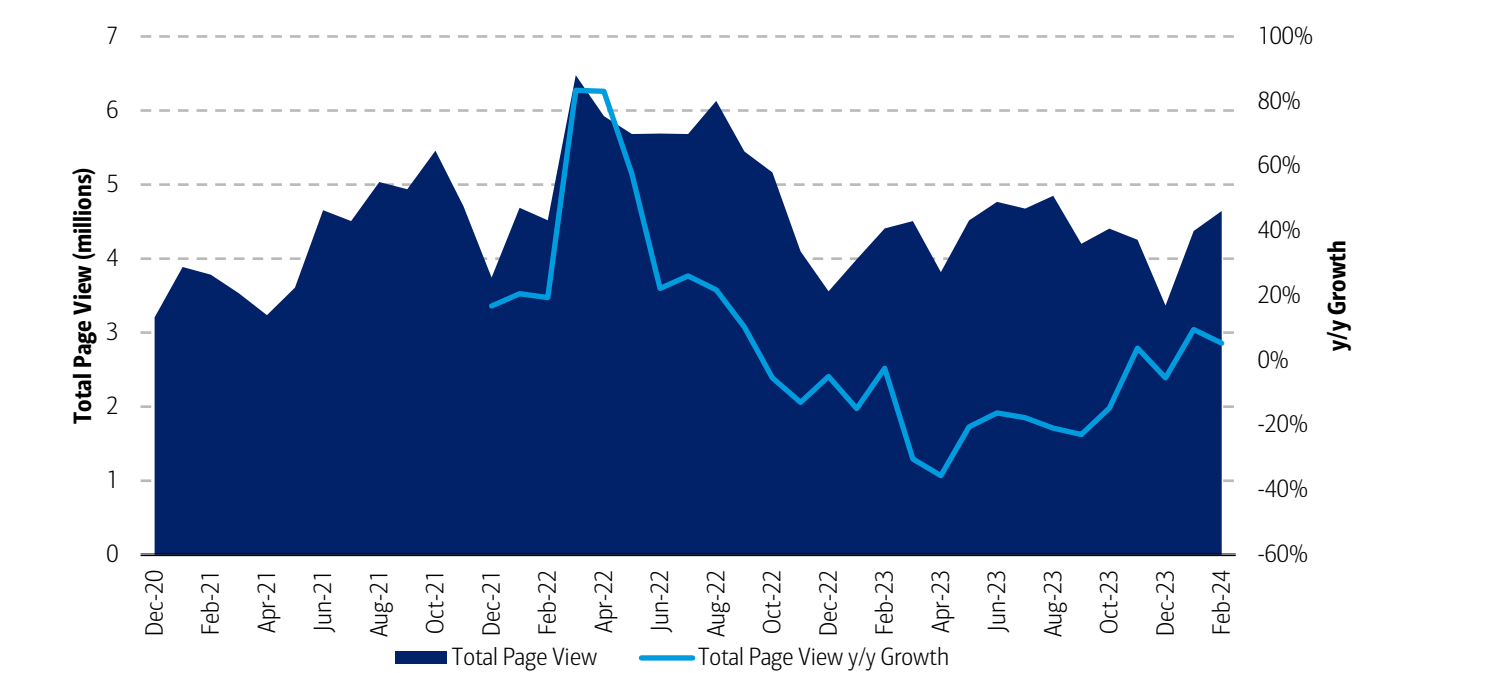
Snowflake	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Total Page View (millions)	4.5	3.8	4.5	4.8	4.7	4.8	4.2	4.4	4.3	3.4	4.4	4.6
y/y %	(30.4%)	(35.6%)	(20.5%)	(16.2%)	(17.7%)	(20.9%)	(22.9%)	(14.7%)	3.8%	(5.4%)	9.6%	5.3%
m/m %	2.2%	(15.3%)	18.3%	5.6%	(1.9%)	3.7%	(13.4%)	4.9%	(3.4%)	(20.8%)	29.9%	6.2%
Trailing 3yr m/m average	18.4%	(8.4%)	3.7%	14.6%	(1.7%)	9.8%	(6.5%)	2.7%	(17.2%)	(16.8%)	19.5%	1.4%

Source: Similarweb

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Exhibit 14: Similarweb Snowflake monthly total page view – Dec 20 to Feb 24

Growth has likely troughed in April 2023 after decelerating significantly post peak level in March 2022



Source: Similarweb

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Desktop vendors

In the **desktop group**, February engaged visit growth of +11.3% y/y accelerated from +10% y/y in January. The m/m growth of -3.6% was weaker than normal February seasonality of -0.4%, which is calculated as the trailing 3-yr m/m average. The desktop group has more exposure to the SMB segment, which is still weighed down by a challenging demand environment (though largely stable).

Exhibit 15: Trailing 12 months Similarweb total page view and engaged visit – desktop vendor average*

As of Feb 2024, both engaged visit and total page view were up or in line y/y from Jan level.

On a m/m basis, Feb data is worse than normal January seasonality (Trailing 3yr m/m average)

Desktop Vendor Average	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Engaged Visit												
y/y %	13.5%	13.3%	23.2%	27.3%	22.4%	18.5%	20.4%	22.9%	18.3%	11.2%	9.9%	11.3%
m/m %	8.8%	(9.5%)	11.6%	11.4%	(0.8%)	4.2%	3.1%	7.5%	(8.0%)	(10.0%)	10.3%	(3.6%)
Trailing 3yr m/m average	19.2%	0.3%	0.1%	(0.9%)	(4.0%)	9.0%	3.5%	2.4%	(1.5%)	(6.3%)	10.4%	(0.4%)
Total Page View												
y/y %	5.8%	6.9%	19.3%	25.4%	19.5%	15.8%	18.2%	21.9%	23.1%	15.5%	16.2%	15.5%
m/m %	9.2%	(8.1%)	17.0%	7.8%	(1.2%)	4.3%	2.6%	4.0%	(9.8%)	(10.2%)	8.3%	(4.8%)
Trailing 3yr m/m average	18.4%	0.0%	(1.5%)	(1.5%)	(3.2%)	8.6%	4.2%	1.1%	(3.1%)	(6.7%)	10.7%	(1.4%)

Source: Similarweb

*For each metric, we calculate the average of the cloud consumption vendors (Adobe Creative Cloud and Firefly, Autodesk, Intuit QuickBooks and Mailchimp, and Microsoft 365)

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Exhibit 16: Trailing 12 months Similarweb total page view and engaged visit – desktop vendor

Microsoft 365 accelerated the most in February, with engaged visit growth of +13.4% y/y, up from +3.9% y/y in January

Desktop Vendors	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Adobe Creative Cloud												
Engaged Visit (millions)	4.5	4.2	4.9	5.9	5.0	5.2	5.6	6.0	5.7	4.9	5.7	5.4
y/y %	22.8%	24.3%	52.2%	86.4%	61.8%	43.3%	55.0%	54.9%	52.9%	41.8%	39.7%	30.9%
m/m %	10.1%	(7.0%)	17.5%	20.2%	(15.1%)	3.0%	8.3%	6.5%	(5.2%)	(12.7%)	14.4%	(5.2%)
Trailing 3yr m/m average	5.5%	(8.8%)	(0.5%)	(0.9%)	(1.9%)	10.5%	0.0%	3.2%	(2.3%)	(6.6%)	9.2%	(8.0%)
Total Page View (millions)	23	21	25	31	26	26	30	31	30	26	30	27
y/y %	27.8%	28.9%	61.2%	103.2%	76.3%	52.1%	68.4%	64.9%	72.0%	58.7%	62.1%	36.9%
m/m %	14.0%	(7.0%)	19.6%	24.0%	(17.2%)	1.5%	14.4%	3.7%	(3.0%)	(14.2%)	14.0%	(8.0%)
Trailing 3yr m/m average	5.4%	(8.8%)	(1.0%)	(0.7%)	(2.8%)	11.1%	1.8%	1.6%	(0.2%)	(10.9%)	6.1%	(6.3%)
Adobe Firefly												
Engaged Visit (millions)	N/A	2.8	3.4	5.7	7.2	5.8	5.9	6.8	5.1	4.8	4.4	4.4
m/m %	N/A	N/A	21.9%	70.6%	24.8%	(18.8%)	1.1%	15.4%	(25.6%)	(6.0%)	(6.7%)	(0.7%)
Total Page View (millions)	N/A	42	64	94	114	91	82	78	46	42	32	33
m/m %	N/A	N/A	52.7%	46.4%	22.1%	(20.8%)	(9.9%)	(4.8%)	(40.7%)	(9.3%)	(22.9%)	1.8%
Autodesk												
Engaged Visit (millions)	7	7	8	7	7	7	8	8	8	7	8	7
y/y %	7.3%	24.9%	33.3%	34.3%	32.1%	28.6%	27.3%	26.1%	22.0%	15.3%	11.1%	16.0%
m/m %	13.8%	0.7%	6.9%	(9.7%)	(4.4%)	9.6%	6.7%	6.9%	(5.5%)	(14.3%)	14.4%	(5.3%)
Trailing 3yr m/m average	16.7%	(10.3%)	(1.8%)	(9.5%)	(4.2%)	12.3%	11.6%	7.7%	(6.1%)	(11.8%)	14.4%	(5.3%)
Total Page View (millions)	32	34	36	32	31	35	38	40	38	32	37	34
y/y %	(8.6%)	12.2%	24.5%	24.5%	25.3%	21.1%	20.4%	21.0%	19.9%	14.4%	15.0%	18.3%
m/m %	10.7%	6.8%	6.7%	(11.8%)	(3.8%)	12.6%	9.6%	6.3%	(6.6%)	(14.2%)	14.0%	(7.7%)
Trailing 3yr m/m average	12.4%	(14.8%)	(6.2%)	(10.8%)	(4.6%)	15.8%	11.0%	5.5%	(9.3%)	(12.6%)	16.0%	(7.0%)
Intuit QuickBooks												
Engaged Visit (millions)	45	40	43	43	42	47	44	47	44	42	50	46
y/y %	7.4%	5.2%	10.0%	5.4%	4.8%	8.3%	9.2%	15.9%	2.8%	14.5%	19.5%	14.8%
m/m %	11.9%	(10.5%)	6.6%	1.0%	(2.9%)	12.0%	(7.1%)	6.7%	(6.9%)	(3.9%)	19.6%	(7.7%)
Trailing 3yr m/m average	51.6%	38.4%	2.3%	8.4%	(1.6%)	3.7%	(6.6%)	0.7%	4.0%	(5.2%)	11.4%	22.8%
Total Page View (millions)	880	783	812	816	804	930	866	926	841	864	1,074	971
y/y %	(4.7%)	(6.2%)	(2.5%)	(6.1%)	(8.7%)	2.0%	0.5%	8.4%	5.8%	15.8%	18.6%	23.0%
m/m %	11.6%	(11.1%)	3.8%	0.4%	(1.4%)	15.6%	(6.9%)	6.9%	(9.1%)	2.7%	24.2%	(9.6%)
Trailing 3yr m/m average	47.6%	41.4%	1.2%	5.8%	1.4%	1.0%	(5.1%)	0.7%	(3.0%)	(0.9%)	18.2%	16.6%
Intuit Mailchimp												
Engaged Visit (millions)	7.0	5.8	6.4	6.2	6.1	6.4	6.3	6.4	6.4	5.8	5.9	5.7
y/y %	8.4%	(3.0%)	3.8%	2.8%	4.7%	3.2%	(0.9%)	(0.1%)	(2.0%)	(17.8%)	(24.9%)	(18.8%)
m/m %	(0.3%)	(17.6%)	10.8%	(2.9%)	(1.8%)	3.9%	(1.2%)	2.4%	0.1%	(9.4%)	0.8%	(2.6%)
Trailing 3yr m/m average	7.6%	(9.2%)	0.2%	0.9%	(4.3%)	3.6%	0.6%	(0.7%)	1.4%	(0.8%)	2.3%	(5.8%)
Total Page View (millions)	21	18	20	19	19	19	19	20	20	18	19	18
y/y %	(2.0%)	(9.8%)	0.8%	(0.6%)	(0.9%)	(3.1%)	(7.1%)	(0.7%)	(0.4%)	(15.6%)	(20.9%)	(14.3%)
m/m %	1.2%	(16.0%)	12.5%	(2.7%)	(1.8%)	0.8%	(0.1%)	4.3%	1.7%	(9.9%)	1.6%	(4.2%)
Trailing 3yr m/m average	8.8%	(9.0%)	(0.9%)	1.4%	(3.2%)	0.4%	2.0%	(2.7%)	1.1%	(0.5%)	0.5%	(6.7%)
Microsoft 365												
Engaged Visit (millions)	737	641	680	609	575	665	736	790	751	648	772	770
y/y %	21.7%	15.0%	16.9%	7.5%	8.6%	9.3%	11.5%	17.6%	15.8%	2.4%	3.9%	13.4%
m/m %	8.6%	(13.1%)	6.2%	(10.5%)	(5.5%)	15.6%	10.8%	7.3%	(5.0%)	(13.7%)	19.1%	(0.3%)
Trailing 3yr m/m average	14.6%	(8.5%)	0.0%	(3.2%)	(8.0%)	14.9%	12.0%	1.1%	(4.5%)	(7.2%)	13.2%	(3.7%)
Total Page View (millions)	3,203	2,777	2,959	2,686	2,550	2,962	3,216	3,453	3,415	2,859	3,398	3,356
y/y %	16.7%	9.3%	12.4%	6.2%	5.6%	7.1%	8.8%	16.0%	18.2%	4.4%	6.2%	13.8%
m/m %	8.6%	(13.3%)	6.6%	(9.3%)	(5.0%)	16.2%	8.6%	7.4%	(1.1%)	(16.3%)	18.8%	(1.2%)
Trailing 3yr m/m average	17.6%	(8.5%)	(0.6%)	(3.2%)	(6.9%)	14.8%	11.1%	0.2%	(4.3%)	(8.5%)	12.5%	(3.5%)

Source: Similarweb

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Adobe Creative Cloud

Per Similarweb, as of February 2024, Adobe Creative Cloud monthly **engaged visit** was 5.4 million. February growth of +30.9% y/y represents a deceleration from +39.7% y/y in January 2024, though still at a strong level. The relative strength is likely driven by Creative Cloud Express in the top of funnel volume. February growth of -5.2% m/m weakened from the strong +14.4% m/m in January 2024. We note that the sequential m/m growth is stronger than normal February seasonality (-8% m/m).

Exhibit 17: Similarweb Adobe Creative Cloud monthly engaged visit - trailing 12 months

As of Feb 2024, monthly engaged visit was 5.4 million, +30.9% y/y and -5.2% m/m

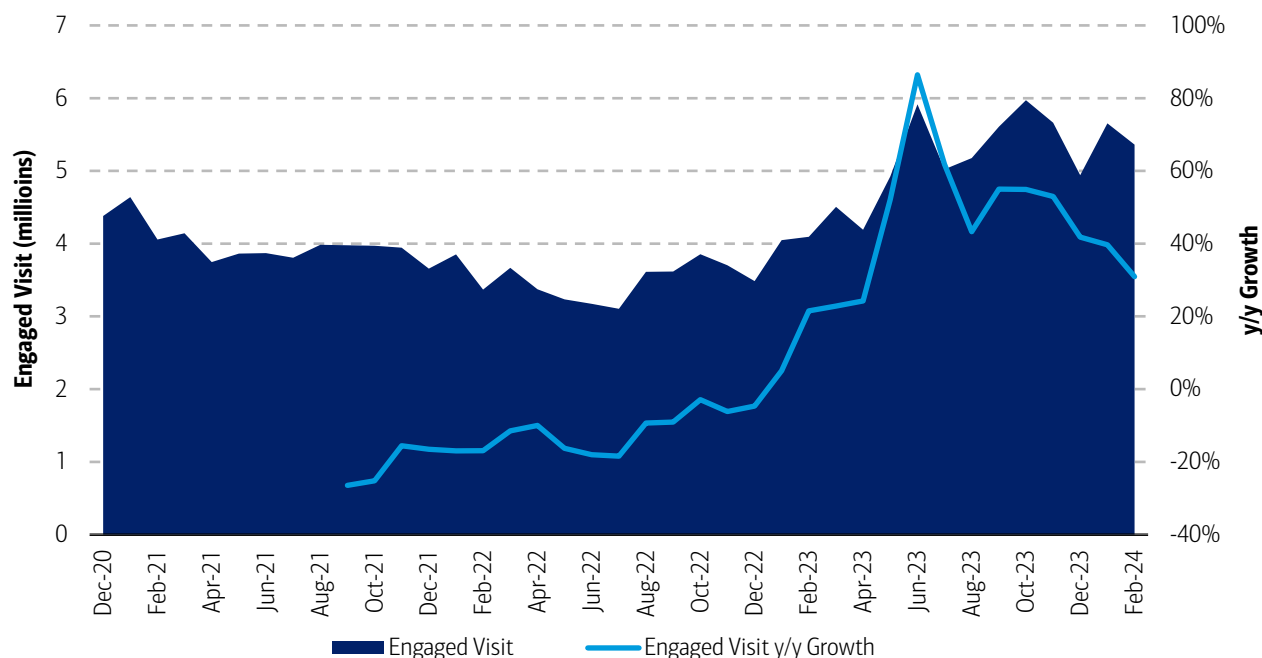
Adobe Creative Cloud	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Engaged Visit (millions)	4.5	4.2	4.9	5.9	5.0	5.2	5.6	6.0	5.7	4.9	5.7	5.4
y/y %	22.8%	24.3%	52.2%	86.4%	61.8%	43.3%	55.0%	54.9%	52.9%	41.8%	39.7%	30.9%
m/m %	10.1%	(7.0%)	17.5%	20.2%	(15.1%)	3.0%	8.3%	6.5%	(5.2%)	(12.7%)	14.4%	(5.2%)
Trailing 3yr m/m average	5.5%	(8.8%)	(0.5%)	(0.9%)	(1.9%)	10.5%	0.0%	3.2%	(2.3%)	(6.6%)	9.2%	(8.0%)

Source: Similarweb

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Exhibit 18: Similarweb Adobe Creative Cloud monthly engaged visit – Dec 20 to Feb 24

y/y growth has accelerated since Feb 2023, likely driven by Creative Cloud Express in the top of funnel volume, though has since tapered down to a more normalized level



Source: Similarweb

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Per Similarweb, as of February 2024, Adobe Creative Cloud monthly **total page view** was 27.3 million. February growth of +36.9% y/y represents a deceleration from the strong +62.1% y/y in January 2024. February growth of -8.0% m/m weakened from +14% m/m in January 2024. We note that the sequential m/m growth is weaker than the normal February seasonality (-6.3% m/m).

Exhibit 19: Similarweb Adobe Creative Cloud monthly total page view – trailing 12 months

As of Feb 2024, monthly total page view was 27.3 million, +36.9% y/y and -8% m/m

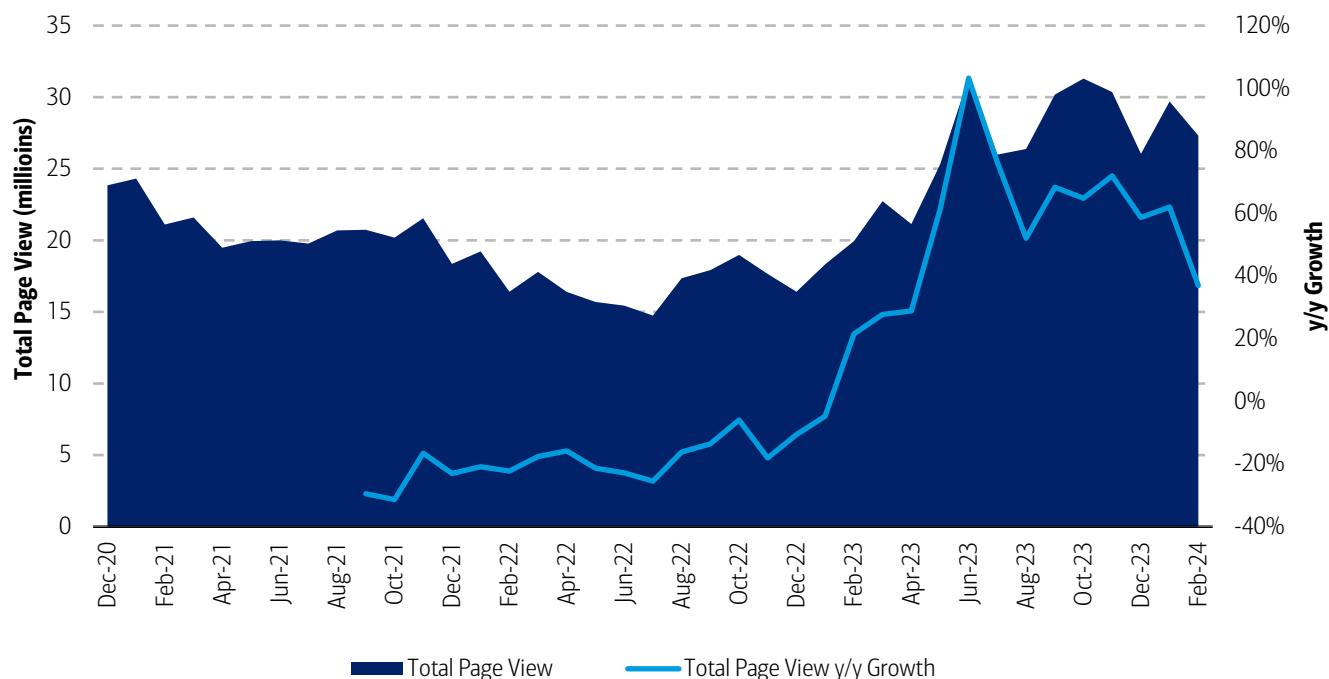
Adobe Creative Cloud	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Total Page View (millions)	22.7	21.1	25.3	31.4	26.0	26.4	30.2	31.3	30.4	26.0	29.7	27.3
y/y %	27.8%	28.9%	61.2%	103.2%	76.3%	52.1%	68.4%	64.9%	72.0%	58.7%	62.1%	36.9%
m/m %	14.0%	(7.0%)	19.6%	24.0%	(17.2%)	1.5%	14.4%	3.7%	(3.0%)	(14.2%)	14.0%	(8.0%)
Trailing 3yr m/m average	5.4%	(8.8%)	(1.0%)	(0.7%)	(2.8%)	11.1%	1.8%	1.6%	(0.2%)	(10.9%)	6.1%	(6.3%)

Source: Similarweb

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Exhibit 20: Similarweb Adobe Creative Cloud monthly total page view – Dec 20 to Feb 24

y/y growth has accelerated since Feb 2024, likely driven by Creative Cloud Express in the top of funnel volume, though has since tapered down to a more normalized level



Source: Similarweb

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Adobe Firefly

Per Similarweb, Adobe Firefly monthly **engaged visit** peaked in July at 7.2 million, since the April launch. Activity improved in October 2023, during the release of Firefly 2.0 at 6.8 million, though has since declined to 4.4 million in January and stabilized at that level in February. February growth of -0.7% m/m recovered from -6.7% m/m in January 2024. We note that Adobe Firefly was initially launched in March 2023. Therefore, we only provide m/m comparison.

Exhibit 21: Similarweb Adobe Firefly monthly engaged visit – Apr 23 to Feb 24

As of Feb 2024, monthly engaged visit was 4.4 million, -6.7% m/m

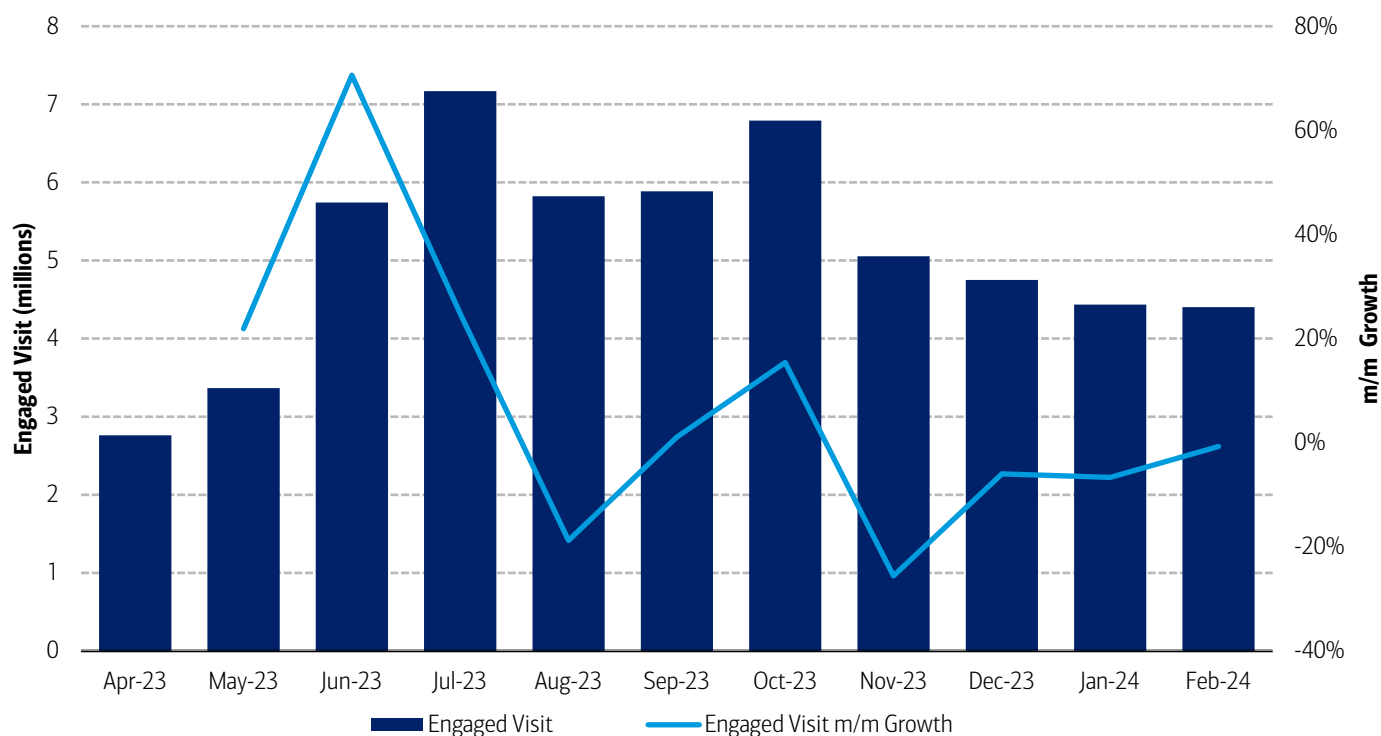
Adobe Firefly	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Engaged Visit (millions)	2.8	3.4	5.7	7.2	5.8	5.9	6.8	5.1	4.8	4.4	4.4
m/m %	0.0%	21.9%	70.6%	24.8%	(18.8%)	1.1%	15.4%	(25.6%)	(6.0%)	(6.7%)	(0.7%)

Source: Similarweb

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Exhibit 22: Similarweb Adobe Firefly monthly engaged visit– Apr 23 to Feb 24

Engaged visit for the Adobe Firefly generative AI content tool peaked in July at 7.2 million, since the April launch. Activity improved in September, during the release of Firefly 2.0 at 6.8 million, though has since declined and stabilized at 4.4 million in February



Source: Similarweb

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Per Similarweb, Adobe Firefly monthly **total page view** peaked in July at 114.4 million, since the April launch, though has since declined and stabilized at 32.8 million in February. February growth of +1.8% m/m represents a recovery from -22.9% m/m in January 2024. We note that Adobe Firefly was initially launched in March 2023. Therefore, we only provide m/m comparison.

Exhibit 23: Similarweb Adobe Firefly monthly total page view – Apr 23 to Feb 24

As of Feb 2024, monthly total page view was 32.8 million, +1.8% m/m

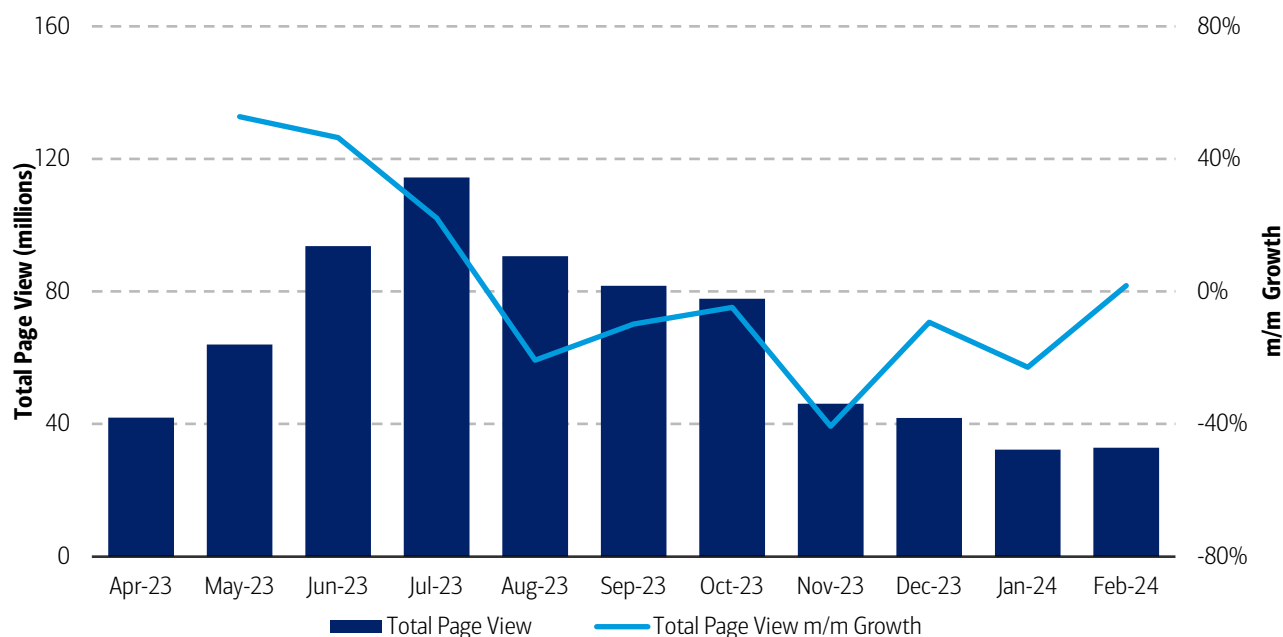
Adobe Firefly	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Total Page View (millions)	41.9	64.0	93.7	114.4	90.6	81.7	77.8	46.1	41.8	32.2	32.8
m/m %	0.0%	52.7%	46.4%	22.1%	(20.8%)	(9.9%)	(4.8%)	(40.7%)	(9.3%)	(22.9%)	1.8%

Source: Similarweb

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Exhibit 24: Similarweb Adobe Firefly monthly total page view – Apr 23 to Feb 24

Total page view for the Adobe Firefly generative AI content tool peaked in July at 114.4 million, since the April launch



Source: Similarweb

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Autodesk

Per Similarweb, as of February 2024, Autodesk monthly **engaged visit** was 7.2 million. February growth of +16% y/y represents an acceleration from +11.1% y/y in January 2024. February growth of -5.3% m/m weakened from +14.4% m/m in January 2024, though the sequential m/m growth is stronger than the normal February seasonality (-7.2% m/m).

Exhibit 25: Similarweb Autodesk monthly engaged visit – trailing 12 months

As of Feb 2024, Autodesk monthly engaged visit was 7.2 million, +16% y/y and -5.3% m/m

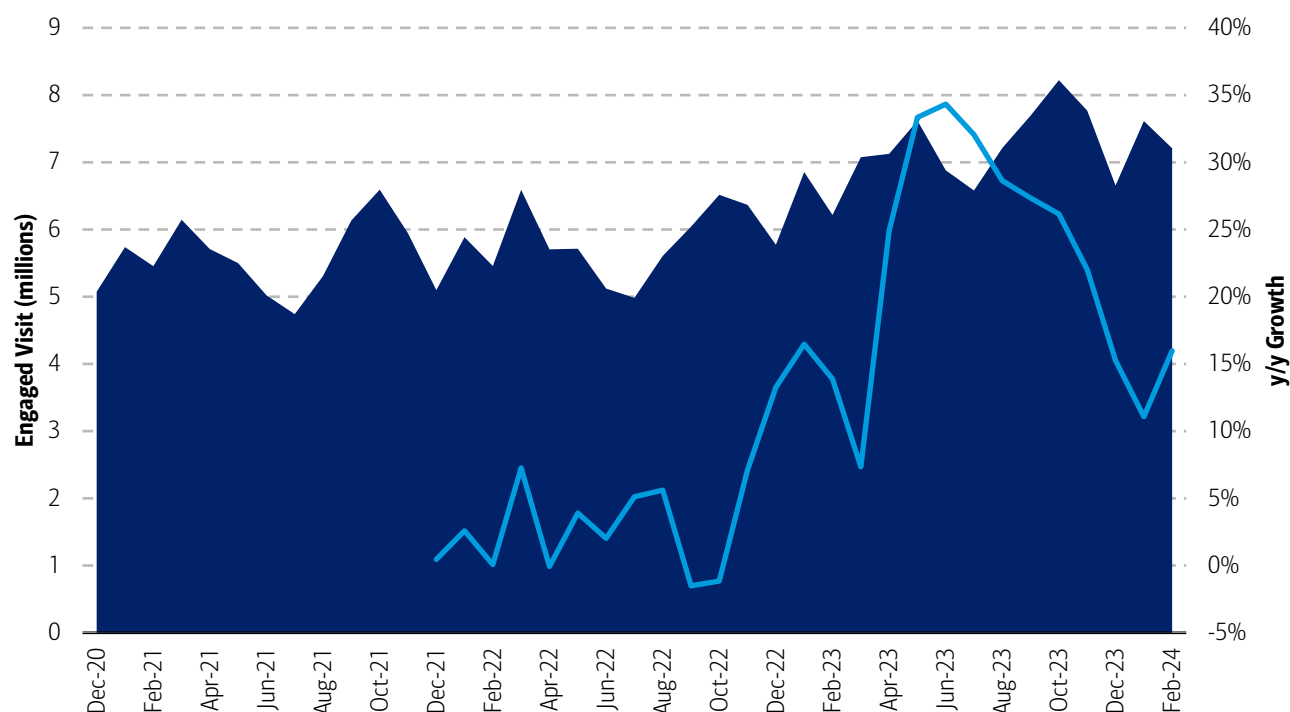
Autodesk	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Engaged Visit (millions)	7.1	7.1	7.6	6.9	6.6	7.2	7.7	8.2	7.8	6.7	7.6	7.2
y/y %	7.3%	24.9%	33.3%	34.3%	32.1%	28.6%	27.3%	26.1%	22.0%	15.3%	11.1%	16.0%
m/m %	13.8%	0.7%	6.9%	(9.7%)	(4.4%)	9.6%	6.7%	6.9%	(5.5%)	(14.3%)	14.4%	(5.3%)
Trailing 3yr m/m average	16.7%	(10.3%)	(1.8%)	(9.5%)	(4.2%)	12.3%	11.6%	7.7%	(6.1%)	(11.8%)	15.8%	(7.2%)

Source: Similarweb

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Exhibit 26: Similarweb Autodesk monthly engaged visit– Dec 20 to Feb 24

Autodesk engaged visit growth has slowed since June 2023, which could reflect a more cautious environment as reflected in recent industry surveys such as the Architecture Billings Index (ABI)



Source: Similarweb

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Per Similarweb, as of February 2024, Autodesk monthly **total page view** was 34 million. February growth of +18.3% y/y represents an acceleration from +15% y/y in January 2024. February growth of -7.7% m/m weakened from +14% m/m in January 2024. We note that the sequential m/m growth is slightly weaker than though largely in line with the normal February seasonality (-7% m/m).

Exhibit 27: Similarweb Autodesk monthly total page view – trailing 12 months

As of Feb 2024, Autodesk monthly total page view was 34 million, +18.3% y/y and -7.7% m/m

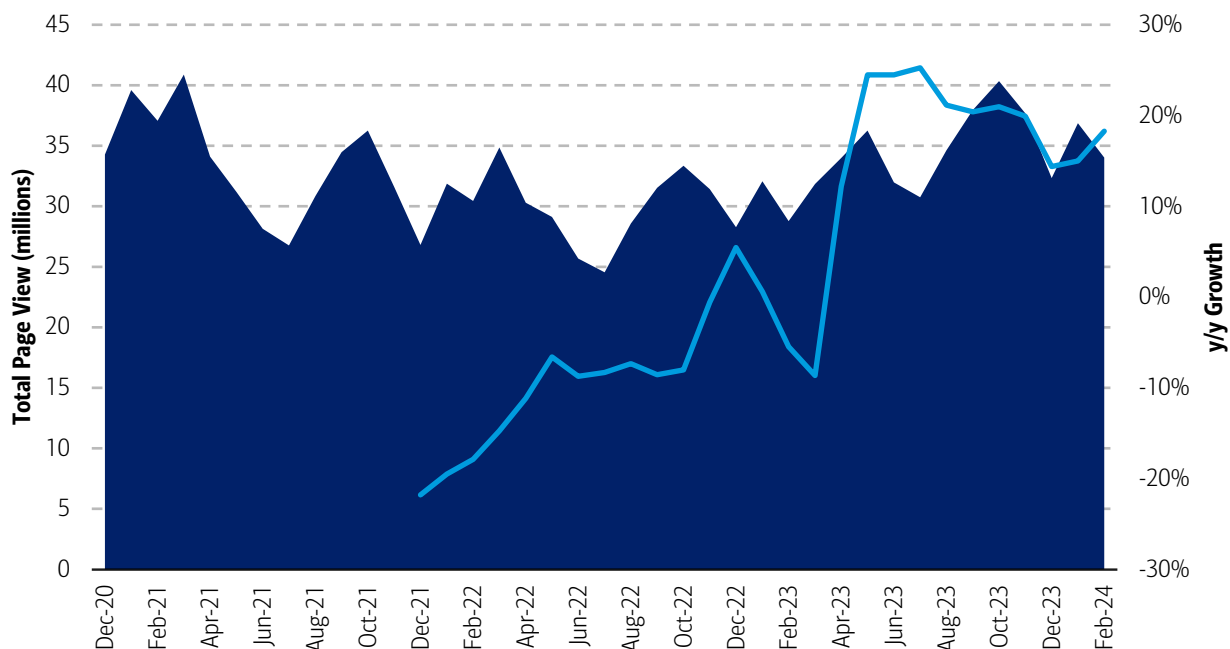
Autodesk	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Total Page View (millions)	31.8	34.0	36.3	32.0	30.8	34.6	38.0	40.3	37.7	32.3	36.9	34.0
y/y %	(8.6%)	12.2%	24.5%	24.5%	25.3%	21.1%	20.4%	21.0%	19.9%	14.4%	15.0%	18.3%
m/m %	10.7%	6.8%	6.7%	(11.8%)	(3.8%)	12.6%	9.6%	6.3%	(6.6%)	(14.2%)	14.0%	(7.7%)
Trailing 3yr m/m average	12.4%	(14.8%)	(6.2%)	(10.8%)	(4.6%)	15.8%	11.0%	5.5%	(9.3%)	(12.6%)	16.0%	(7.0%)

Source: Similarweb

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Exhibit 28: Similarweb Autodesk monthly total page view – Dec 20 to Feb 24

Autodesk engaged visit growth has slowed since June 2023, which could reflect a more cautious environment as reflected in recent industry surveys such as the Architecture Billings Index (ABI)



Source: Similarweb

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Intuit: QuickBooks and Mailchimp

Per Similarweb, as of February 2024, **QuickBooks** monthly **engaged visit** was 46.3 million. February growth of +14.8% y/y represents a deceleration from +19.5% y/y in January 2024. February growth of -7.7% m/m weakened from the strong +19.6% m/m in January 2024. We note that the sequential m/m growth is weaker than the normal February seasonality (+22.8% m/m).

As of February 2024, **Mailchimp** monthly **engaged visit** was 5.7 million. February growth of -18.8% y/y was better than -24.9% y/y in January 2024. February growth of -2.6% m/m weakened from +0.8% m/m in January 2024. We note that the sequential m/m growth is stronger than the normal February seasonality (-5.8% m/m).

Exhibit 29: Similarweb QuickBooks and Mailchimp monthly engaged visit – trailing 12 months

As of Feb 2024, QuickBooks monthly engaged visit was 46.3 million, +14.8% y/y and -7.7% m/m

Mailchimp monthly engaged visit was 5.7 million, -18.8% y/y and -2.6% m/m

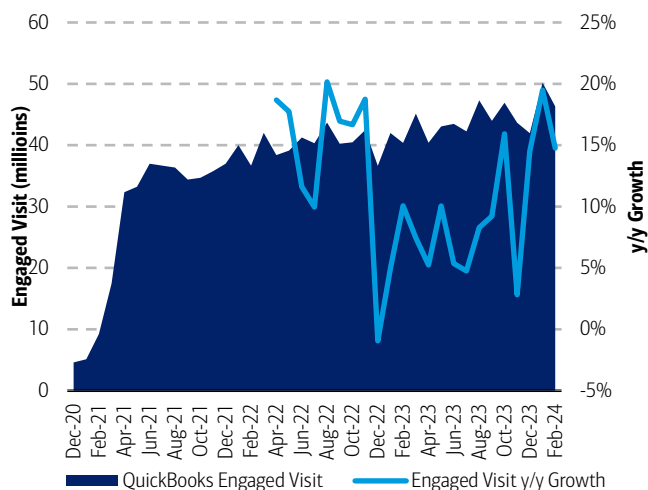
Engaged Visit (millions)	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Intuit QuickBooks	45.2	40.4	43.1	43.5	42.2	47.3	44.0	46.9	43.7	42.0	50.2	46.3
y/y %	7.4%	5.2%	10.0%	5.4%	4.8%	8.3%	9.2%	15.9%	2.8%	14.5%	19.5%	14.8%
m/m %	11.9%	(10.5%)	6.6%	1.0%	(2.9%)	12.0%	(7.1%)	6.7%	(6.9%)	(3.9%)	19.6%	(7.7%)
Trailing 3yr m/m average	51.6%	38.4%	2.3%	8.4%	(1.6%)	3.7%	(6.6%)	0.7%	4.0%	(5.2%)	11.4%	22.8%
Intuit Mailchimp	7.0	5.8	6.4	6.2	6.1	6.4	6.3	6.4	6.4	5.8	5.9	5.7
y/y %	8.4%	(3.0%)	3.8%	2.8%	4.7%	3.2%	(0.9%)	(0.1%)	(2.0%)	(17.8%)	(24.9%)	(18.8%)
m/m %	(0.3%)	(17.6%)	10.8%	(2.9%)	(1.8%)	3.9%	(1.2%)	2.4%	0.1%	(9.4%)	0.8%	(2.6%)
Trailing 3yr m/m average	7.6%	(9.2%)	0.2%	0.9%	(4.3%)	3.6%	0.6%	(0.7%)	1.4%	(0.8%)	2.3%	(5.8%)

Source: Similarweb

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Exhibit 30: Similarweb QuickBooks monthly engaged visit – Dec 20 to Feb 24

Intuit QuickBooks accelerated significantly starting 2H23, likely due to the benefit from integration with the MailChimp marketing suite released in September 2023

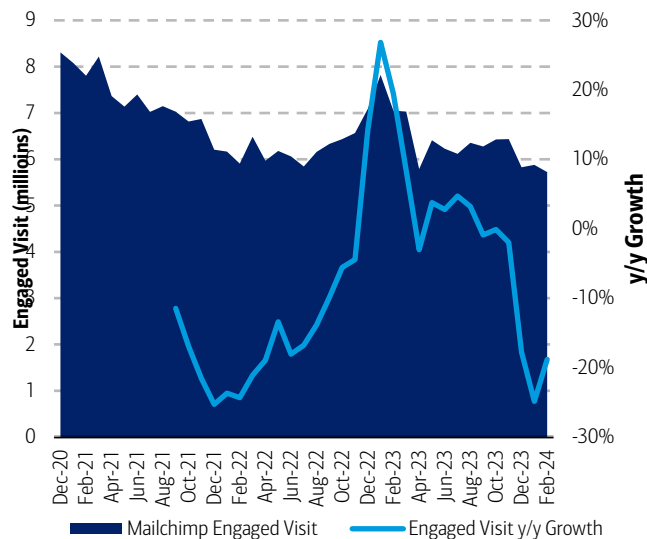


Source: Similarweb

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Exhibit 31: Similarweb Mailchimp monthly engaged visit – Dec 20 to Feb 24

Intuit Mailchimp decelerated significantly on a y/y basis, likely due to disruption from ongoing efforts to integrate the suite with QuickBooks



Source: Similarweb

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Per Similarweb, as of February 2024, **QuickBooks** monthly **total page view** was 971 million. February growth of +23% y/y represents an acceleration from +18.6% y/y in January 2024. February growth of -9.6% m/m weakened from the strong +24.2% m/m in January 2024. We note that the sequential m/m growth is weaker than the normal February seasonality (+16.6% m/m).

As of February 2024, **Mailchimp** monthly **total page view** was 17.9 million. February growth of -14.3% y/y represents an acceleration from -20.9% y/y in January 2024. February growth of -4.2% m/m weakened from +1.6% m/m in January 2024. We note that the sequential growth is stronger than the normal February seasonality (-6.7% m/m).

Exhibit 32: Similarweb QuickBooks and Mailchimp monthly total page view – trailing 12 months

As of Feb 2024, QuickBooks monthly total page view was 971 million, +23% y/y and -9.6% m/m
Mailchimp monthly total page view was 17.9 million, -14.3% y/y and -4.2% m/m

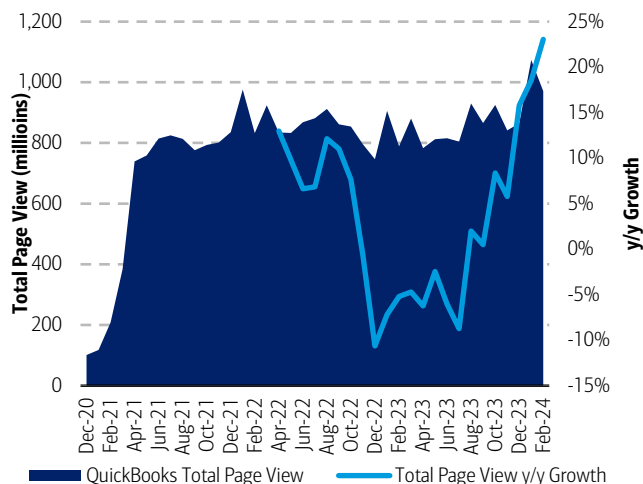
Total Page View (millions)	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Intuit QuickBooks	880.5	782.7	812.5	815.8	804.4	930.3	865.7	925.5	841.4	864.4	1,073.6	970.9
y/y %	(4.7%)	(6.2%)	(2.5%)	(6.1%)	(8.7%)	2.0%	0.5%	8.4%	5.8%	15.8%	18.6%	23.0%
m/m %	11.6%	(11.1%)	3.8%	0.4%	(1.4%)	15.6%	(6.9%)	6.9%	(9.1%)	2.7%	24.2%	(9.6%)
Trailing 3yr m/m average	47.6%	41.4%	1.2%	5.8%	1.4%	1.0%	(5.1%)	0.7%	(3.0%)	(0.9%)	18.2%	16.6%
Intuit Mailchimp	21.2	17.8	20.0	19.5	19.1	19.3	19.3	20.1	20.4	18.4	18.7	17.9
y/y %	(2.0%)	(9.8%)	0.8%	(0.6%)	(0.9%)	(3.1%)	(7.1%)	(0.7%)	(0.4%)	(15.6%)	(20.9%)	(14.3%)
m/m %	1.2%	(16.0%)	12.5%	(2.7%)	(1.8%)	0.8%	(0.1%)	4.3%	1.7%	(9.9%)	1.6%	(4.2%)
Trailing 3yr m/m average	8.8%	(9.0%)	(0.9%)	1.4%	(3.2%)	0.4%	2.0%	(2.7%)	1.1%	(0.5%)	0.5%	(6.7%)

Source: Similarweb

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Exhibit 33: Similarweb QuickBooks monthly total page view – Dec 20 to Feb 24

Intuit QuickBooks y/y growth troughed in late 2022 and has largely recovered since, likely due to the benefit from integration with the MailChimp marketing suite

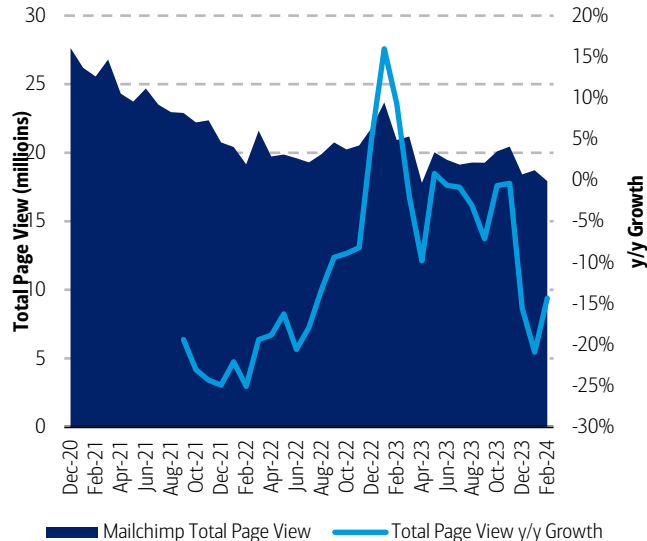


Source: Similarweb

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Exhibit 34: Similarweb Mailchimp monthly total page view – Dec 20 to Feb 24

Intuit Mailchimp decelerated significantly on a y/y basis, likely due to disruption from ongoing efforts to integrate the suite with QuickBooks



Source: Similarweb

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Microsoft 365

Per Similarweb, as of February 2024, Microsoft 365 monthly **engaged visit** was 769.8 million. February growth of +13.4% y/y represents a strong acceleration from +3.9% y/y in January 2024. We also note that since the Microsoft 365 Copilot early access program launched in May, y/y growth for engaged visit decelerated to 8% - 9% from mid/high teens level, before reaccelerating to 12% - 18% in the months leading up to GA in November. February growth of -0.3% m/m weakened from a strong +19.1% m/m in January 2024. We note that the sequential m/m growth is stronger than the normal February seasonality (-3.7% m/m).

Exhibit 35: Similarweb Microsoft 365 monthly engaged visit – trailing 12 months

As of Feb 2024, monthly engaged visit was 770 million, +13.4% y/y and -0.3% m/m

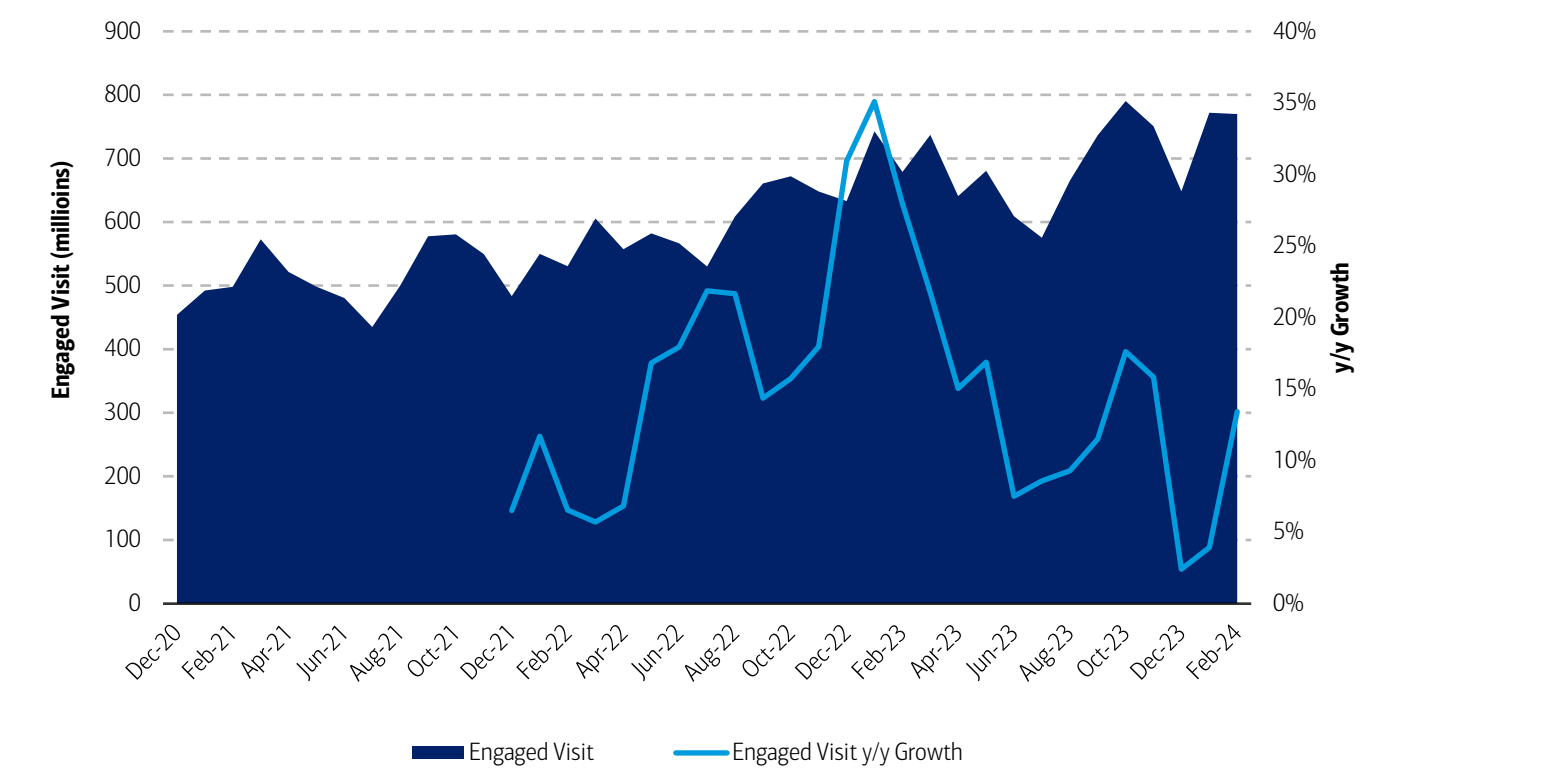
Microsoft 365	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Engaged Visit (millions)	737.1	640.8	680.5	609.0	575.3	665.0	736.5	790.4	750.7	648.2	771.9	769.8
y/y %	21.7%	15.0%	16.9%	7.5%	8.6%	9.3%	11.5%	17.6%	15.8%	2.4%	3.9%	13.4%
m/m %	8.6%	(13.1%)	6.2%	(10.5%)	(5.5%)	15.6%	10.8%	7.3%	(5.0%)	(13.7%)	19.1%	(0.3%)
Trailing 3yr m/m average	14.6%	(8.5%)	0.0%	(3.2%)	(8.0%)	14.9%	12.0%	1.1%	(4.5%)	(7.2%)	13.2%	(3.7%)

Source: Similarweb

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Exhibit 36: Similarweb Microsoft 365 monthly engaged visit – Dec 20 to Feb 24

Since the Microsoft 365 Copilot early access program launched in May 2023, y/y growth reaccelerated to 12% to 18% in the months leading up to the general availability in December 2023



Source: Similarweb

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Per Similarweb, as of February 2024, Microsoft 365 monthly **total page view** was 3.4 billion. February growth of +13.8% y/y represents a strong acceleration from +6.2% y/y in January 2024. We also note that since the Microsoft 365 Copilot early access program launched in May, y/y growth for engaged visit decelerated to 6% - 9% from high teens level, before reaccelerating to mid/high teens in the months leading up to GA in November. February growth of -1.2% m/m weakened from the strong +18.8% m/m in January 2024. We note that the sequential m/m growth is stronger than the normal February seasonality (-3.5% m/m).

Exhibit 37: Similarweb Microsoft 365 monthly total page view – trailing 12 months

As of Feb 2024, monthly total page view was 3.4 billion, +13.8% y/y and -1.2% m/m

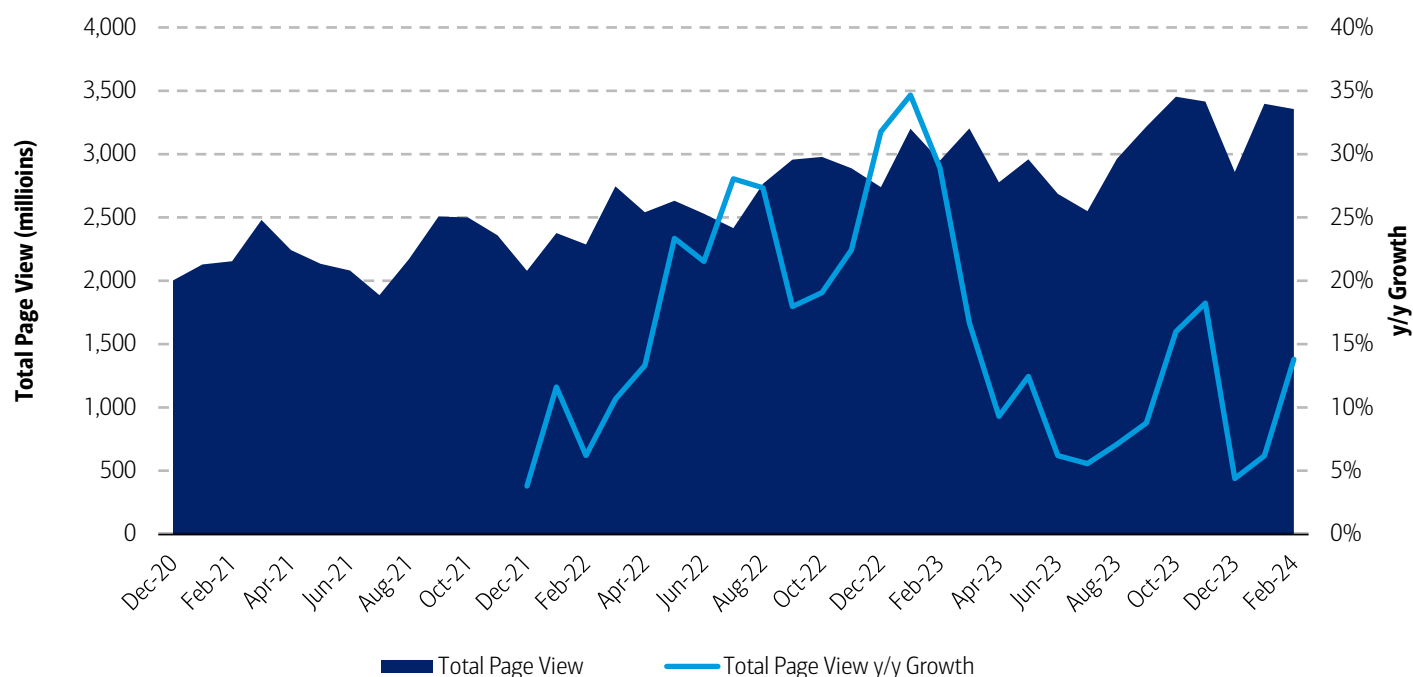
Microsoft 365	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24
Total Page View (millions)	3,202.7	2,777.3	2,959.4	2,685.6	2,550.1	2,962.4	3,216.2	3,453.3	3,414.8	2,859.1	3,397.9	3,355.7
y/y %	16.7%	9.3%	12.4%	6.2%	5.6%	7.1%	8.8%	16.0%	18.2%	4.4%	6.2%	13.8%
m/m %	8.6%	(13.3%)	6.6%	(9.3%)	(5.0%)	16.2%	8.6%	7.4%	(1.1%)	(16.3%)	18.8%	(1.2%)
Trailing 3yr m/m average	17.6%	(8.5%)	(0.6%)	(3.2%)	(6.9%)	14.8%	11.1%	0.2%	(4.3%)	(8.5%)	12.5%	(3.5%)

Source: Similarweb

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Exhibit 38: Similarweb Microsoft 365 monthly total page view – Dec 20 to Feb 24

Since the Microsoft 365 Copilot early access program launched in May 2023, the y/y growth has been in the 6% to 9% range, before accelerating to 18% in October ahead of the general availability in November



Source: Similarweb

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Appendix

Our analysis methodology

We leverage *Similarweb* to track web traffic of a product or a platform's login page for a collective of cloud consumption vendors (namely **Datadog** and **Snowflake**) and desktop products (namely **Adobe Creative Cloud** and **Firefly**, **Autodesk**, **Intuit QuickBooks** and **Mailchimp**, and **Microsoft 365**). Given the above software offerings are web-based only, we believe the web traffic data provides a comprehensive understanding of end-user interaction and engagement with these vendors' platform or products.

For **MongoDB Atlas** (Mongo's key cloud offering), a majority of the users run workloads via a command line interface (CLI) instead of the web-based interface, which makes the web traffic data of Atlas login page less meaningful for inference. Instead, we leverage the *Similarweb Web Market Analysis*. This data represents the end-user engagement with websites/applications across a comprehensive list of industries. Given that MongoDB Atlas' consumption revenue is closely tied to end-user activity of the underlying website/application market, we believe this data is a better directional indicator for Atlas' consumption revenue.

Metric definition and calculation

For all vendors, we track two metrics: “**total page view**” and “**engaged visit**”

1. “**Total page view**” is defined as the average number of pageviews across all pages within a site over a given period, which in our analysis is a month.
2. “**Engaged visit**” is a calculated metric defined as $\text{visits} * (1 - \text{bounce rate})$, where **bounce rate** is defined as the percentage of visitors who enter a site and leave after visiting only one page.

Correlation analysis

We define and calculate correlation as the correlation coefficient of Similarweb data and the respective company's growth metric. While the correlation to growth metrics such as subscription and product revenue varies by vendor, we believe the data is helpful for directional read across the group.

Exhibit 39: Correlation analysis – cloud consumption vendors

Our analysis shows high correlation between Similarweb data and the respective company's revenue (growth)

Company Product	Revenue Line Item	Similarweb Metric	Trailing 8 Quarters Correlation
Datadog	Total revenue y/y growth	Quarterly engaged visit y/y growth	82.8%
MongoDB Atlas	Atlas Revenue y/y growth	Daily engaged visit previous 90 day average	84.2%
Snowflake	Product Revenue sequential adds	Quarterly total page view	78.4%

Source: BofA Global Research

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Exhibit 40: Correlation analysis – desktop vendors

Our analysis shows high correlation between Similarweb data and the respective company's product revenue (growth)

Company Product	Revenue Line Item	Similarweb Metric	Trailing 8 Quarters Correlation
Adobe Creative Cloud	Creative Cloud ARR y/y growth	Quarterly engaged visit with 4 quarters lag	92.3%
Autodesk	Subscription & Maintenance Revenue	Quarterly engaged visit	84.3%
Intuit QuickBooks + Mailchimp	Small Business & Self Employed revenue	Quarterly engaged visit	99.0%
Microsoft 365	Office Products & Cloud Services revenue	Quarterly engaged visit	83.2%

Source: BofA Global Research

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Exhibit 41: Stocks mentioned

Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
ADBE	ADBE US	Adobe	US\$ 551.69	B-1-9
ADSK	ADSK US	Autodesk	US\$ 251.86	B-2-9
DDOG	DDOG US	Datadog Inc	US\$ 121.31	C-2-9
INTU	INTU US	Intuit	US\$ 651.73	B-1-7
MSFT	MSFT US	Microsoft	US\$ 406.22	B-1-7
MDB	MDB US	MongoDB	US\$ 383.42	C-1-9
SNOW	SNOW US	Snowflake	US\$ 162.4	C-2-9

Source: BofA Global Research

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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 cyclical, and 3) future acquisitions, which could weigh on margin expansion.

Autodesk (ADSK)

Our \$300 PO is based on an EV/EBITDA multiple of 26x our CY25 EBITDA estimate. The 26x multiple is slightly above the design software peer group average of 24x. We believe a slight premium multiple is warranted by the company's near-term growth outlook, 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.

Datadog Inc (DDOG)

Our \$144 PO is based on an EV/revenue multiple of 19.1x EV/CY24E (was 18.8x) to our CY24E revenue estimate of \$2.6bn. We raise our multiple to account for our increased confidence in Datadog's potential to drive upside to consensus estimates and infrastructure group multiple expansion. The 19.1x multiple represents an EV/revenue/growth multiple of 0.9x, which is above infrastructure peers at 8.3x/0.7x.

Upside risks to our PO: 1) better-than-expected revenue growth, 2) faster-than-expected AI tailwinds, 3) better-than-expected expanding free cash flow margins, 4) expanding NRR, and 5) stronger-than-expected competitive differentiation.



Downside risks to our PO: 1) valuation risk, 2) competition, 3) deteriorating NRR, 4) execution, and 5) enterprise software spend can be cyclical.

Intuit (INTU)

Our PO of \$760 is based on 37x our C25E FCF. It implies 1.8x on a growth-adjusted basis (assuming a normalized 20% CAGR for FCF), a premium to the large cap GARP software peer group average of 1.4x 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.

Microsoft Corporation (MSFT)

Our PO of \$480 is based on an EV/FCF multiple of 43x our C25E free cash flow estimate. The growth-adjusted multiple of 1.8x trades at a premium to the large cap GARP group, which we view as warranted given our view of Microsoft as a leading AI play in software.

Downside risks to our price objective: 1) Microsoft could see some near term gross margin pressure as the Azure business grows as a percentage of overall revenue. While Microsoft's on premise offerings offer a high margin profile, growth in these lines of business is decelerating. 2) Enterprise application spending has proven to be highly cyclical, given the more discretionary nature of applications projects. During an economic slowdown, when firms are faced with shrinking IT budgets, projects involving application upgrades, migrations or new installations are often deferred. This could present a higher degree of risk for a bookings deceleration for Microsoft and other application vendors, in the event of an economic slowdown.

MongoDB Inc (MDB)

Our PO of \$500 is based on EV/sales of 17x our CY25e, or 0.7x our C25 revenue growth rate of 26%, a premium to the large-cap peers at 0.6x (17% growth) for higher growth trajectory.

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.

Snowflake (SNOW)

Our PO of \$212 is based on EV/sales of 22x our CY25e, or 0.6x our C26E exit revenue growth rate of 28%, in line with the large-cap peers at 0.6x.

Upside risks to our PO: Snowflake recognizes revenue based on actual consumption (versus subscription ratably in arrears). In the event of changes to market sentiment on macro abating and IT spend returning to normal, consumption and revenue growth could quickly reaccelerate which could drive multiple expansion.

Downside risks to our PO: 1) Snowflake trades at a significant premium to its software large-cap peer group. 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's consumption model implies more revenue volatility than a traditional subscription model, 3) Snowflake serves in a highly competitive market, which consists of deep-pocketed next-gen DBMS vendors, public cloud vendors and legacy DBMS. An inability to execute on a product roadmap for added capabilities could result in slowing share gains or even share losses.

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
	Asana	ASAN	ASAN US	Michael J. Funk
	BILL	BILL	BILL US	Brad Sills
	CCC Intelligent Solutions	CCCS	CCCS 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
	Monday.com	MNDY	MNDY US	Michael J. Funk
	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
	ZoomInfo	ZI	ZI 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
	Vertex, Inc.	VERX	VERX US	Brad Sills
	Zoom Video Communications	ZM	ZM US	Michael J. Funk
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
	Dropbox	DBX	DBX US	Michael J. Funk
	Enfusion, Inc.	ENFN	ENFN US	Koji Ikeda, CFA

US - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Five9	FIVN	FIVN US	Michael J. Funk
	Guidewire Software, Inc.	GWRE	GWRE US	Michael J. Funk
	Smartsheet	SMAR	SMAR US	Michael J. Funk
	Twilio	TWLO	TWLO US	Michael J. Funk

RSTR

	Splunk	SPLK	SPLK US	Brad Sills
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Disclosures

Important Disclosures

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.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS**, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. **INVESTMENT RATINGS** reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

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%

^{R2} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. **Coverage Cluster** is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

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The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Adobe, Autodesk, Intuit, Microsoft Corp, Snowflake Inc.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Adobe, Autodesk, Datadog Inc, Intuit, Microsoft Corp, MongoDB, Snowflake Inc.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Adobe, Autodesk, Datadog Inc, Intuit, Microsoft Corp, MongoDB, Snowflake Inc.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Adobe, Autodesk, Intuit, Microsoft Corp, Snowflake Inc.

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: Adobe, Intuit, Microsoft Corp.

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