

## Media &amp; Entertainment

## Life in the main stream, vol. 48 – NFL playoffs a touchdown for Peacock

Industry Overview

## Video download and MAU growth weak in January

We analyzed January data for 27 streaming video entertainment services which show weakness in Y/Y download and MAU growth. Key takeaways include:

- 1) In aggregate across all video streaming services, downloads declined 17% Y/Y and fell 1% M/M, with Y/Y declines across every category we track.
- 2) MAUs declined 7% Y/Y and were flat M/M.
- 3) Netflix garnered 14.9mn downloads (-16% Y/Y) and 311mn MAUs (-12% Y/Y) equating to 31% (vs. 32% last month) of all mass appeal downloads and 52% (vs. 52% last month) of all mass appeal MAUs.
- 4) Disney+ downloads (-28%) and MAUs (-1%) declined Y/Y.
- 5) Max/HBO Max Y/Y downloads (-14%) declined for the first time since September '23.

## Video: Download growth mostly weak across M&amp;E

Of the 12 M&E companies tracked in our video streaming analysis, 2 companies saw Y/Y download growth and 4 saw Y/Y MAU growth in January 2024. Key takeaways include:

- 1) FWONK and CMCSA saw Y/Y download growth.
- 2) DAZN, FWONK, MANU and MGM saw Y/Y MAU growth.
- 3) Disney collected 11.2mn downloads (-24%) and 138.4mn MAUs (-3% Y/Y) across Disney+, Hulu and ESPN+.
- 4) WBD registered 6.8mn downloads (-15% Y/Y) and 43.2mn MAUs (-3% Y/Y).
- 5) PARA downloads (8.5mn) declined Y/Y and sequentially (-29% Y/Y; -11% M/M).
- 6) CMCSA's Peacock downloads surged 28% Y/Y and 30% M/M.

## Music: Strong MAU, weak download data

Outside of video, our comparable analysis for 7 streaming music services showed decrease in Y/Y and M/M downloads, while MAUs were up Y/Y and flat M/M. Key takeaways include:

- 1) Download activity growth in aggregate was -5% Y/Y and -14% M/M.
- 2) MAU growth in aggregate was +9% Y/Y and flat M/M.
- 3) Downloads grew Y/Y for YouTube Music (+2%) and were flat Y/Y for Spotify.
- 4) Spotify (+7%) and YouTube Music (+17%) saw healthy Y/Y MAU growth.
- 5) Spotify, at 25mn monthly downloads and ~510mn MAUs, continues to dwarf other services accounting for ~69% of downloads and ~53% of MAUs across the music apps we track.

## Streaming-exclusive NFL game drives massive acquisition

For the first time in NFL history a playoff game was available exclusively on streaming, as the January 13<sup>th</sup> wild card matchup between the Kansas City Chiefs and the Miami Dolphins streamed exclusively on NBCU's Peacock. The game drove the biggest subscriber acquisition moment ever measured by data provider Antenna. Antenna estimates 2.8mn sign-ups to Peacock over a three-day period. As noted above, for January, Peacock's downloads surged 28% Y/Y and 30% M/M per Sensor Tower data. Live sports will continue to be a key strategic opportunity for streaming platforms, as further indicated by NFLX's \$5bn deal earlier this month for the exclusive rights to WWE's Raw in the US and several international markets beginning in 2025.

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Equity  
United States  
Media & Entertainment

**Jessica Reif Ehrlich**  
Research Analyst  
BofAS  
+1 646 855 2921  
[jessica.reif@bofa.com](mailto:jessica.reif@bofa.com)

**Peter Henderson**  
Research Analyst  
BofAS  
+1 646 855 4564  
[peter2.henderson@bofa.com](mailto:peter2.henderson@bofa.com)

**Brent Navon, CFA**  
Research Analyst  
BofAS  
+1 646 855 3827  
[brent.navon@bofa.com](mailto:brent.navon@bofa.com)

**David Plaus**  
Research Analyst  
BofAS  
+1 646 855 1572  
[david.plaus@bofa.com](mailto:david.plaus@bofa.com)

MAU = Monthly active user

M&amp;E = Media &amp; Entertainment

PARA = Paramount Global

WBD = Warner Bros. Discovery

NBCU = NBCUniversal

NFLX = Netflix

CMCSA = Comcast

FWONK – Liberty Formula One

MANU- Manchester United

# Download Activity

## Exhibit 1: Summary of Monthly Download Trends By Company

Sensor Tower downloads by company show mixed Y/Y download activity

	Streaming Service Profile			App Downloads By Month <sup>2</sup>			Y/Y Chg. In App Downloads By Month <sup>3</sup>			
	Ticker	Cume Downloads <sup>1</sup>	Key Services Measured	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD
<b>Media &amp; Entertainment</b>										
AMC Networks	AMCX	8,862,943	Acorn TV, Shudder, UMC	50,702	61,017	54,604	-29%	-10%	-40%	-40%
DAZN Group	NM	72,851,203	DAZN	650,013	786,721	848,582	2%	90%	-24%	-24%
Warner Bros. Discovery	WBD	411,021,815	HBO Max/Max, Eurosport Player, discovery+, Dplay, FKN	7,794,936	7,082,468	6,819,065	44%	20%	-15%	-15%
Dish Network	DISH	27,808,256	Sling TV	504,207	460,836	543,369	23%	53%	115%	115%
Disney	DIS	901,180,840	Disney+, Hulu, ESPN+/ESPN	12,306,381	11,464,252	11,232,995	-13%	-28%	-24%	-24%
Fox	FOX	207,135,298	Tubi, Fox Nation	2,754,633	2,560,333	2,603,621	-5%	-12%	-17%	-17%
iHeartMedia	IHRT	139,221,393	iHeartRadio	428,091	369,807	413,968	3%	-7%	-7%	-7%
Liberty Formula One Group	FWONK	11,643,500	F1TV	279,629	72,323	78,291	98%	74%	34%	34%
Lionsgate	LGF	65,407,525	STARZ	336,807	409,429	270,681	16%	-4%	-50%	-50%
Manchester United	MANU	15,546,813	MANU App	105,414	126,443	119,158	-42%	-29%	-52%	-52%
Metro-Goldwyn-Mayer	MGM	5,026,098	MGM+	88,813	92,500	78,022	138%	179%	-6%	-6%
Sirius XM	SIRI	384,627,905	Pandora, Sirius XM App	1,075,345	1,203,287	1,002,040	-8%	-9%	-15%	-15%
Spotify	SPOT	2,057,741,009	Spotify	25,669,034	29,286,521	25,263,366	0%	7%	0%	0%
Paramount	PARA	420,709,658	Paramount+, BET+, Pluto, Noggin	9,606,308	9,565,515	8,466,486	-4%	-24%	-29%	-29%
Comcast	CMCSA	80,414,639	Peacock	2,666,818	2,192,483	2,851,677	-35%	-30%	28%	28%
<b>FAANG</b>										
Amazon	AMZN	1,084,213,984	Amazon Prime, Amazon Music	12,789,067	13,688,920	13,484,073	-25%	-16%	-16%	-16%
Apple	AAPL	116,282,874	Apple Music	1,402,595	1,476,756	1,321,843	-7%	-6%	-13%	-13%
Google	GOOGL	756,709,549	YouTube TV, YouTube Music	7,003,962	7,750,315	7,045,878	9%	6%	3%	3%
Netflix	NFLX	1,712,323,846	Netflix	13,326,741	15,369,998	14,883,068	-4%	-14%	-16%	-16%

### Notes:

1. Cume Downloads represents total cumulative app downloads as measured on Apple iOS and Android-enabled mobile and tablet devices, 2012-present; does not include connected TV or PC app downloads; figures do not represent active or paying subscribers
2. App Downloads By Month represents total monthly app downloads as measured on Apple iOS and Android-enabled mobile and tablet devices, does not include connected TV or PC app downloads; figures do not represent active or paying subscribers
3. Y/Y Chg. In App Downloads By Month represents the year-over-year change in monthly downloads vs. the prior year period; QTD represents the calendar quarter-to-date year-over-year change in downloads vs. the prior year period
4. Although this data represents a small window into the underlying commercial strength of a streaming service (as it reflects iOS/Android mobile/tablet app downloads only—excluding PCs and connected TVs and not factoring for multiple downloads per account), we believe it offers helpful signaling in terms of relative strength and directional gross subscriber addition trends for M&E's next leg of content monetization.

**Source:** BofA Global Research, Sensor Tower

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**Exhibit 2: Summary of Monthly App Download Trends By Stream Media Service Type**

Sensor Tower downloads by company show mixed Y/Y download activity

	Streaming Service Profile					App Downloads By Month <sup>4</sup>			Y/Y Chg. In App Downloads By Month <sup>5</sup>				BofAS Comment
Mass Appeal	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
Amazon Prime	AMZN	805,958,291	>200	\$15/mo.	SVOD	9,814,104	10,259,497	10,695,313	-24%	-12%	-8%	-8%	
Disney+	DIS	531,278,309	150	\$7-14/mo.	AVOD/SVOD	9,058,195	8,637,465	8,113,121	-13%	-33%	-28%	-28%	
HBO Max/Max	WBD	316,962,917	nm	\$10-20/mo.	AVOD/SVOD	7,290,752	6,449,179	6,256,582	53%	21%	-14%	-14%	
Hulu	DIS	240,840,190	48	\$10-18/mo.	AVOD/SVOD/VMVPD	1,798,379	1,635,686	1,711,589	1%	-6%	4%	4%	
Netflix	NFLX	1,712,323,846	260	\$7-23/mo.	AVOD/SVOD	13,326,741	15,369,998	14,883,068	-4%	-14%	-16%	-16%	
Paramount+	PARA	151,297,539	63	\$6-12/mo.	AVOD/SVOD	4,147,226	4,239,194	3,490,249	10%	-21%	-47%	-47%	
Peacock	CMCSA	80,414,639	24	\$6-12/mo.	AVOD/SVOD	2,666,818	2,192,483	2,851,677	-35%	-30%	28%	28%	Peacock hosted an NFL playoff game exclusively on 1/13
TOTAL	--	3,839,075,731	-822	--	--	48,102,215	48,783,502	48,001,599	-7%	-16%	-18%	-18%	
Premium	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
MGM+	MGM	5,026,098	nm	\$6/mo.	SVOD	88,813	92,500	78,022	138%	179%	-6%	-6%	
STARZ	LGE	65,407,525	27	\$9/mo.	SVOD	336,807	409,429	270,681	16%	-4%	-50%	-50%	
TOTAL	--	70,433,623	-27	--	--	425,620	501,929	348,703	30%	10%	-44%	-44%	
Mid-tier	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
BET+	PARA	12,879,146	2	\$6-10/mo.	AVOD/SVOD	186,880	171,007	227,927	-13%	-7%	-4%	-4%	
Noggin	PARA	20,304,764	3	\$8/mo.	AVOD/SVOD	68,937	81,779	88,458	-8%	-44%	-45%	-45%	
Pluto TV	PARA	227,069,154	79	Free	AVOD	5,164,112	5,037,594	4,616,179	-12%	-26%	-4%	-4%	
Sling TV	DISH	27,808,256	2	\$35-50/mo.	VMVPD	504,207	460,836	543,369	23%	53%	115%	115%	
YouTube TV	GOOGL	58,844,075	4	\$65/mo.	VMVPD	1,153,906	1,058,459	1,213,687	-7%	-11%	8%	8%	
Tubi	FOX	201,766,770	nm	Free	AVOD	2,658,275	2,472,176	2,522,355	-3%	-12%	-18%	-18%	
TOTAL	--	548,672,165	91	--	--	9,736,317	9,281,851	9,211,975	-8%	-19%	-5%	-5%	
Niche	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
Acorn TV	AMCX	1,459,557	>1	\$5/mo.	SVOD	4,435	15,587	19,485	-46%	90%	76%	76%	
Food Network Kitchen	WBD	16,624,949	nm	\$7/mo.	AVOD/SVOD	17,951	18,853	19,808	-27%	-16%	-17%	-17%	
Shudder	AMCX	5,002,016	>1	\$5/mo.	SVOD	42,862	35,140	27,986	-16%	-8%	-31%	-31%	
UMC	AMCX	2,401,370	nm	\$5/mo.	SVOD	3,405	10,290	7,133	-73%	-52%	-82%	-82%	
TOTAL	--	25,487,892	nm	--	--	68,653	79,870	74,412	-29%	-12%	-35%	-35%	
U.S. Sports/News	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
CBSN	PARA	9,159,055	nm	Free	AVOD	39,153	35,941	43,673	-60%	-60%	-63%	-63%	
ESPN+	DIS	129,062,341	25	\$10/mo.	SVOD/LIVE	1,449,807	1,191,101	1,408,285	-27%	-11%	-26%	-26%	
Fox Nation	FOX	5,368,528	nm	\$6/mo.	SVOD/LIVE	96,358	88,157	81,266	-40%	-9%	14%	14%	
TOTAL	--	143,589,924	25	--	--	1,585,318	1,315,199	1,533,224	-29%	-14%	-27%	-27%	
International	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
DAZN	NM	72,851,203	nm	\$20/mo.	AVOD/SVOD	650,013	786,721	848,582	2%	90%	-24%	-24%	
discovery+/Dplay	WBD	66,367,734	nm	\$5-7/mo.	AVOD/SVOD	481,719	607,717	522,274	-21%	20%	-30%	-30%	
Eurosport Player	WBD	11,066,215	nm	E7/mo.	SVOD/LIVE	4,514	6,719	20,401	-85%	-76%	-35%	-35%	
F1 TV	FWONK	11,643,500	nm	\$3-10/mo.	SVOD/LIVE	279,629	72,323	78,291	98%	74%	34%	34%	
MANU App	MANU	15,546,813	nm	Free	Ad-Supported/Pay	105,414	126,443	119,158	-42%	-29%	-52%	-52%	
TOTAL	--	177,475,465	-24	--	--	1,521,289	1,599,923	1,588,706	-5%	37%	-28%	-28%	
Music	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
Amazon Music	AMZN	278,255,693	55	\$8-10/mo.	Ad-Supported/Pay	2,974,963	3,429,423	2,788,760	-31%	-26%	-38%	-38%	
Apple Music	AAPL	116,282,874	>78	\$10/mo.	Pay	1,402,595	1,476,756	1,321,843	-7%	-6%	-13%	-13%	
iHeart Radio	IHRT	139,221,393	nm	\$5-10/mo.	Ad-Supported/Pay	428,091	369,807	413,968	3%	-7%	-7%	-7%	
Pandora	SIRI	333,513,596	55	\$5-10/mo.	Ad-Supported/Pay	601,760	726,731	631,077	-6%	-5%	-11%	-11%	
Sirius XM App	SIRI	51,114,309	nm	\$13/mo.	Pay	473,585	476,556	370,963	-11%	-14%	-20%	-20%	
Spotify	SPOT	2,057,741,009	520	\$11/mo.	Ad-Supported/Pay	25,669,034	29,286,521	25,263,366	0%	7%	0%	0%	
YouTube Music	GOOGL	697,865,474	50	\$10/mo.	Pay	5,850,056	6,691,856	5,832,191	13%	10%	2%	2%	
TOTAL	--	3,673,994,348	680	--	--	37,400,084	42,457,650	36,622,168	-2%	3%	-5%	-5%	

**Notes:**

1. Cume Downloads represents total cumulative app downloads as measured on Apple iOS and Android-enabled mobile and tablet devices, 2012-present; does not include connected TV or PC app downloads; figures do not represent active or paying subscribers

2. Subs represents either publicly disclosed or estimated subscribers to SVOD, AVOD or VMVPD services, where available; Pluto TV, Pandora and Spotify figures expressed in terms of monthly active users (MAUs); Paramount+ represent U.S. subs; discovery+/Dplay represent all next-gen subscribers

3. AVOD = advertising-supported video-on-demand, SVOD = subscription video-on-demand, VMVPD = virtual multichannel video programming distributor

4. App Downloads By Month represents total monthly app downloads as measured on Apple iOS and Android-enabled mobile and tablet devices; does not include connected TV or PC app downloads; figures do not represent active or paying subscribers

5. Y/Y Chg. In App Downloads By Month represents the year-over-year change in monthly downloads vs. the prior year period; QTD represents the calendar quarter-to-date year-over-year change in downloads vs. the prior year period

**Source:** BofAS Global Research, Sensor Tower, Company Reports, Press Reports

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### Exhibit 3: Summary of Monthly App Download Trends By Stream Media Service Type

Sensor Tower downloads by company show mixed Y/Y download activity

Streaming Service Profile						Y/Y Change In App Downloads By Month <sup>4,5</sup>												
	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	iOS Rating <sup>3</sup>	Andr. Rating <sup>3</sup>	Feb. 2023	Mar. 2023	Apr. 2023	May 2023	Jun. 2023	Jul. 2023	Aug. 2023	Sep. 2023	Oct. 2023	Nov. 2023	Dec. 2023	Jan. 2024
<b>Mass Appeal</b>																		
Amazon Prime	AMZN	805,958,291	>200	\$15/mo.	4.8	4.2	-6%	3%	2%	26%	13%	26%	4%	-19%	-9%	-24%	-12%	-8%
Disney+	DIS	531,278,309	150	\$7-14/mo.	4.6	4.4	13%	-9%	-15%	-9%	-31%	-33%	-23%	-13%	-15%	-13%	-33%	-28%
HBO Max/Max	WBD	316,962,917	nm	\$10-20/mo.	4.9	4.7	-32%	-38%	-42%	186%	96%	50%	9%	-4%	21%	53%	21%	-14%
Hulu	DIS	240,840,190	48	\$10-18/mo.	4.6	4.5	-26%	-16%	-24%	-15%	-11%	-17%	-26%	-15%	-19%	1%	-6%	4%
Netflix	NFLX	1,712,323,846	260	\$7-23/mo.	3.7	4.3	-9%	-6%	-9%	-3%	4%	1%	-2%	0%	-2%	-4%	-14%	-16%
Paramount+	PARA	151,297,539	63	\$6-12/mo.	4.6	3.8	125%	35%	23%	25%	11%	18%	23%	10%	22%	10%	-21%	-47%
Peacock	CMCSA	80,414,639	24	\$6-12/mo.	4.6	4.5	-61%	-13%	4%	7%	0%	-18%	1%	-16%	-11%	-35%	-30%	28%
TOTAL	--	3,839,075,731	-822	--	--	--	-8%	-9%	-12%	30%	7%	3%	-3%	-9%	-4%	-7%	-16%	-18%
<b>Premium</b>																		
MGM+	MGM	5,026,098	nm	\$6/mo.	4.8	4.1	146%	70%	44%	67%	199%	101%	103%	216%	304%	138%	179%	-6%
STARZ	LGE	65,407,525	27	\$9/mo.	4.8	4.0	-35%	-16%	-4%	-8%	-54%	-49%	-52%	-24%	-15%	16%	-4%	-50%
TOTAL	--	70,433,623	-27	--	--	--	-26%	-11%	3%	3%	-41%	-42%	-44%	-13%	8%	30%	10%	-44%
<b>Mid-tier</b>																		
BET+	PARA	12,879,146	2	\$6-10/mo.	3.8	3.6	143%	62%	13%	-3%	-29%	-14%	28%	1%	-52%	-13%	-7%	-4%
Noggin	PARA	20,304,764	3	\$8/mo.	3.6	3.5	3%	21%	-5%	-25%	-28%	-27%	-40%	-48%	-49%	-8%	-44%	-45%
Pluto TV	PARA	227,069,154	79	Free	4.8	3.9	23%	83%	17%	13%	4%	-6%	8%	-2%	-5%	-12%	-26%	-4%
Sling TV	DISH	27,808,256	2	\$35-50/mo.	4.6	3.8	38%	35%	80%	131%	162%	293%	52%	13%	20%	23%	53%	115%
YouTube TV	GOOGL	58,844,075	4	\$65/mo.	4.0	3.8	104%	60%	16%	18%	-12%	-6%	23%	102%	11%	-7%	-11%	8%
Tubi	FOX	201,766,770	nm	Free	4.7	4.8	26%	25%	17%	24%	43%	39%	9%	5%	3%	-3%	-12%	-18%
TOTAL	--	548,672,165	91	--	--	--	34%	61%	18%	19%	9%	10%	10%	15%	-3%	-8%	-19%	-5%
<b>Niche</b>																		
Acorn TV	AMCX	1,459,557	>1	\$5/mo.	4.6	4.3	-44%	-23%	-36%	-41%	-24%	-20%	-45%	-37%	-73%	-46%	90%	76%
Food Network Kitchen	WBD	16,624,949	nm	\$7/mo.	4.8	4.3	-45%	-14%	25%	2%	-21%	-15%	-21%	-14%	-21%	-27%	-16%	-17%
Shudder	AMCX	5,002,016	>1	\$5/mo.	4.6	4.4	2%	-13%	-29%	-51%	-45%	-25%	-48%	-24%	-46%	-16%	-8%	-31%
UMC	AMCX	2,401,370	nm	\$5/mo.	2.3	3.2	-5%	-19%	-58%	-69%	-66%	-66%	-4%	287%	0%	-73%	-52%	-82%
TOTAL	--	25,487,892	nm	--	--	--	-18%	-17%	-32%	-50%	-46%	-36%	-32%	5%	-40%	-29%	-12%	-35%
<b>U.S. Sports/News</b>																		
CBSN	PARA	9,159,055	nm	Free	4.0	4.3	-35%	-56%	-47%	-61%	-52%	-51%	-39%	-61%	-46%	-60%	-60%	-63%
ESPN+	DIS	129,062,341	25	\$10/mo.	4.4	3.8	24%	19%	19%	19%	-23%	12%	23%	1%	-12%	-27%	-11%	-26%
Fox Nation	FOX	5,368,528	nm	\$6/mo.	4.6	3.5	-16%	-23%	-26%	-36%	-37%	-26%	-21%	37%	4%	-40%	-9%	14%
TOTAL	--	143,589,924	25	--	--	--	15%	3%	12%	11%	-26%	4%	15%	0%	-12%	-29%	-14%	-27%
<b>International</b>																		
DAZN	NM	72,851,203	nm	\$20/mo.	4.6	4.0	39%	-22%	39%	-5%	-2%	0%	-20%	-35%	48%	2%	90%	-24%
discovery+/Dplay	WBD	66,367,734	nm	\$5-7/mo.	4.9	4.7	-71%	-63%	-62%	-58%	-66%	-63%	-40%	-9%	53%	-21%	20%	-30%
Eurosport Player	WBD	11,066,215	nm	E7/mo.	4.5	3.6	-93%	-82%	-86%	-89%	-69%	-71%	-77%	-90%	-82%	-85%	-76%	-35%
F1 TV	FWONK	11,643,500	nm	\$3-10/mo.	2.4	3.1	312%	37%	147%	8%	9%	-6%	24%	84%	1%	98%	74%	34%
MANU App	MANU	15,546,813	nm	Free	3.9	4.7	48%	14%	20%	45%	-14%	-45%	-2%	-13%	-49%	-42%	-29%	-52%
TOTAL	--	177,475,465	nm	--	--	--	-25%	-24%	-5%	-23%	-38%	-40%	-22%	-20%	31%	-5%	37%	-28%
<b>Music</b>																		
Amazon Music	AMZN	278,255,693	55	\$8-10/mo.	4.7	4.3	23%	8%	13%	8%	-2%	-9%	-10%	-13%	-13%	-31%	-26%	-38%
Apple Music	AAPL	116,282,874	>78	\$10/mo.	nm	3.9	-12%	-10%	-14%	-2%	9%	15%	9%	20%	3%	-7%	-6%	-13%
iHeart Radio	IHRT	139,221,393	nm	\$5-10/mo.	4.6	4.6	4%	12%	-8%	-1%	67%	-24%	-13%	-7%	-9%	3%	-7%	-7%
Pandora	SIRI	333,513,596	55	\$5-10/mo.	4.8	4.3	-29%	-37%	-18%	-8%	-5%	-4%	-4%	-3%	-8%	-6%	-5%	-11%
Sirius XM	SIRI	51,114,309	nm	\$13/mo.	4.8	4.8	20%	12%	6%	-6%	-7%	-11%	-8%	-12%	-22%	-11%	-14%	-20%
Spotify	SPOT	2,057,741,009	520	\$11/mo.	4.8	4.4	2%	-9%	-9%	25%	5%	8%	2%	30%	16%	0%	7%	0%
YouTube Music	GOOGL	697,865,474	50	\$10/mo.	4.8	4.5	1%	-7%	4%	12%	15%	8%	3%	0%	21%	13%	10%	2%
TOTAL	--	3,673,994,348	680	--	--	--	2%	-8%	-6%	19%	6%	6%	1%	20%	12%	-2%	3%	-5%

#### Notes:

1. Cume Downloads represents total cumulative app downloads as measured on Apple iOS and Android-enabled mobile and tablet devices, 2012-present; does not include connected TV or PC app downloads; figures do not represent active or paying subscribers

2. Subs represents either publicly disclosed or estimated subscribers to SVOD, AVOD or VMVPD services, where available; Pluto TV, Pandora and Spotify figures expressed in terms of monthly active users (MAUs); CBS ALL Access represent U.S. subs; discovery+/Dplay represent all next-gen subscribers

3. Represents average customer review score as of current month in the Apple iOS and Android app stores, with a best possible score of 5

4. App Downloads By Month represents total monthly app downloads as measured on Apple iOS and Android-enabled mobile and tablet devices, does not include connected TV or PC app downloads; figures do not represent active or paying subscribers

5. Y/Y Chg. In App Downloads By Month represents the year-over-year change in monthly downloads vs. the prior year period; QTD represents the calendar quarter-to-date year-over-year change in downloads vs. the prior year period

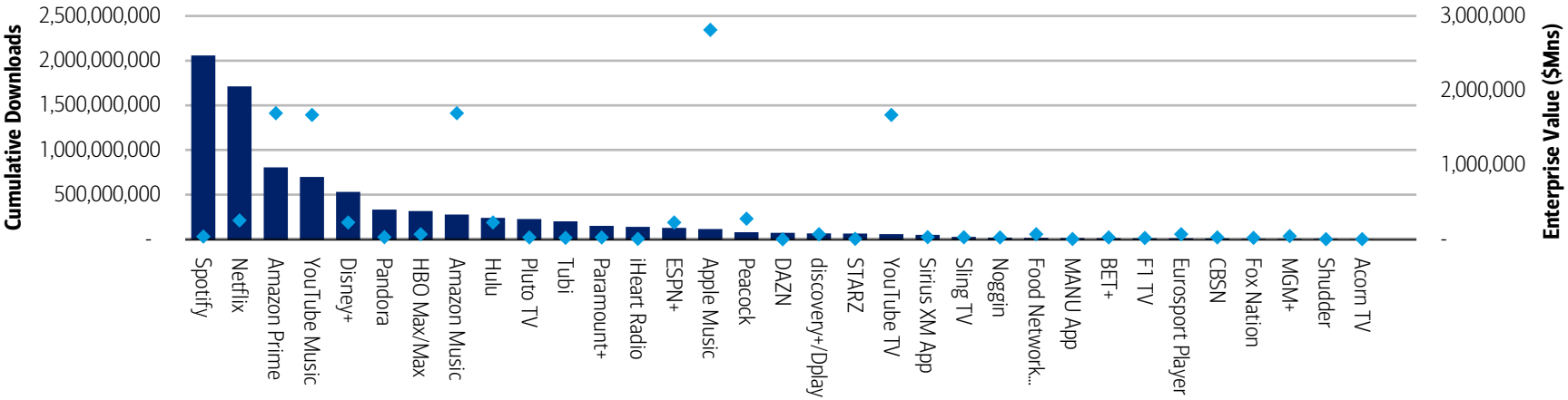
Source: BofA Global Research, Sensor Tower, Company Reports, Press Reports

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**Exhibit 4: Top streaming media services, as ranked by cumulative worldwide app downloads, 2012-present**

Sensor Tower downloads monthly by service - Netflix remains the leading video service and Spotify the leading music service by cumulative worldwide app downloads

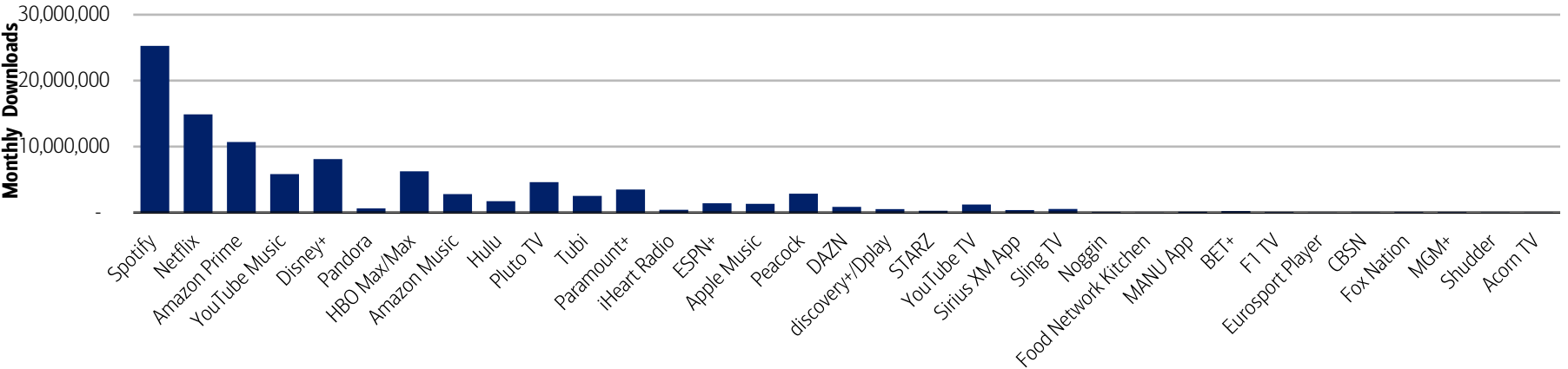


Source: BofA Global Research, Sensor Tower

BofA GLOBAL RESEARCH

**Exhibit 5: Streaming media services worldwide app downloads, current month activity**

Sensor Tower downloads by service

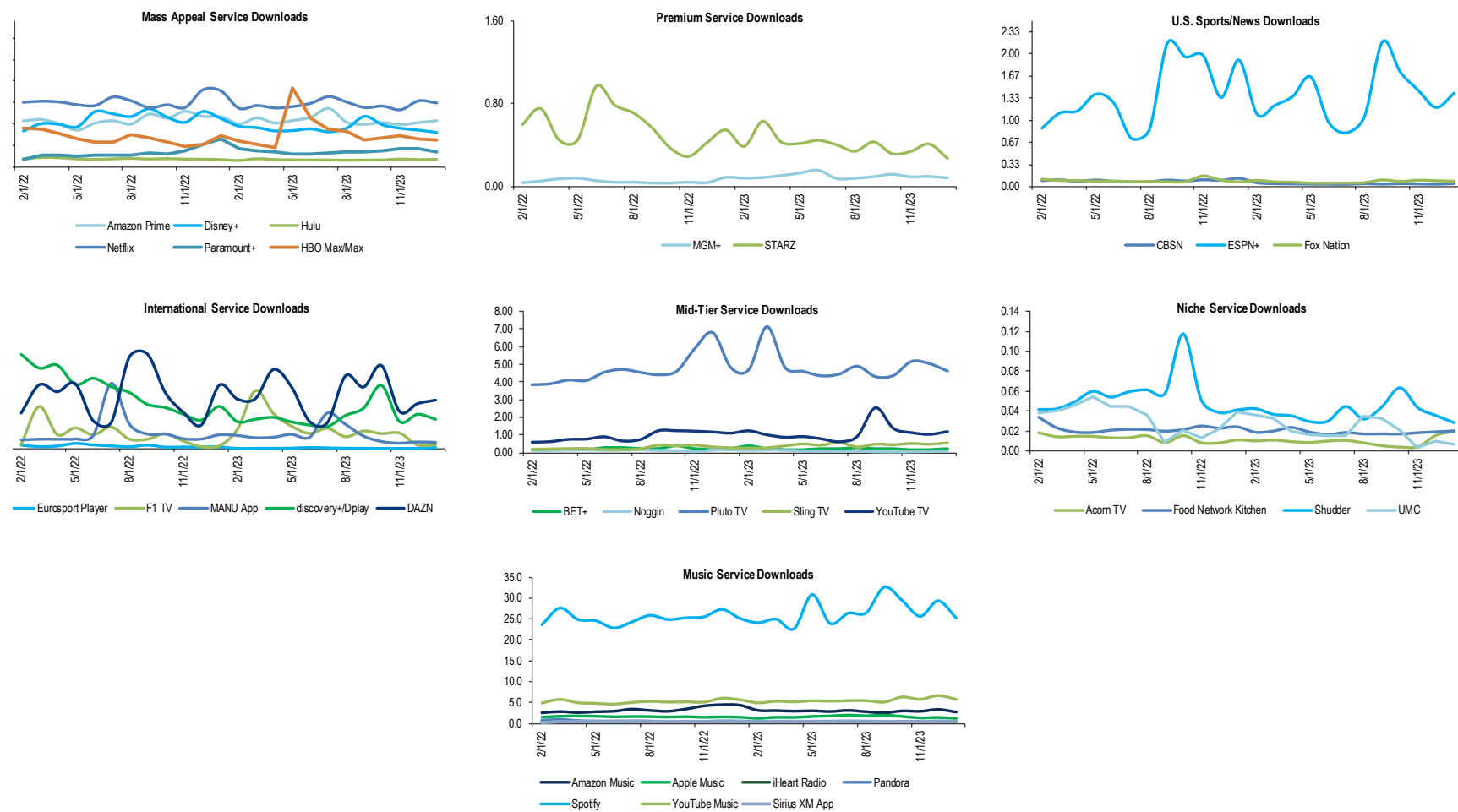


Source: BofA Global Research, Sensor Tower

BofA GLOBAL RESEARCH

## Exhibit 6: Total worldwide downloads per month (millions)

Sensor Tower monthly downloads by service



Source: BofA Global Research, Sensor Tower

BofA GLOBAL RESEARCH





# Monthly Active Users (MAUs)

## Exhibit 7: Summary of Monthly Active User (MAU) Trends By Company

Sensor Tower MAUs by company show mixed Y/Y results

	Streaming Service Profile			App MAUs By Month <sup>2</sup>			Y/Y Chg. In App MAUs By Month <sup>3</sup>			
	Ticker	Cume Downloads <sup>1</sup>	Key Services Measured	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD
<b>Media &amp; Entertainment</b>										
AMC Networks	AMCX	8,862,943	Acorn TV, Shudder, UMC	139,750	124,485	115,416	-29.3%	-33.4%	-41.0%	-41.0%
DAZN Group	NM	72,851,203	DAZN	5,415,511	5,525,886	5,309,872	6.4%	41.8%	3.1%	3.1%
Warner Bros. Discovery	WBD	411,021,815	HBO Max/Max, Eurosport Player, discovery+, Dplay, FNK	42,847,041	43,166,594	43,214,882	7.2%	7.2%	-2.6%	-2.6%
Dish Network	DISH	27,808,256	Sling TV	1,380,234	1,399,064	1,483,485	38.9%	46.3%	54.2%	54.2%
Disney	DIS	901,180,840	Disney+, Hulu, ESPN+/ESPN	139,454,936	138,919,686	138,437,238	-3.7%	-5.0%	-3.4%	-3.4%
Fox	FOX	207,135,298	Tubi, Fox Nation	12,595,448	12,396,934	12,553,765	1.5%	1.1%	-2.5%	-2.5%
iHeartMedia	IHRT	139,221,393	iHeartRadio	2,814,101	2,849,206	2,743,638	-15.8%	-4.2%	-7.0%	-7.0%
Liberty Formula One Group	FWONK	11,643,500	F1TV	839,591	691,234	678,859	35.8%	32.5%	28.7%	28.7%
Lionsgate	LGF	65,407,525	STARZ	1,550,130	1,596,333	1,375,298	-23.2%	-26.6%	-38.5%	-38.5%
Manchester United	MANU	15,546,813	MANU App	3,203,359	3,362,724	3,202,974	6.4%	10.4%	1.3%	1.3%
Metro-Goldwyn-Mayer	MGM	5,026,098	MGM+	95,684	97,649	88,205	130.3%	166.4%	18.2%	18.2%
Sirius XM	SIRI	384,627,905	Pandora, Sirius XM App	29,070,512	28,188,391	27,780,661	-14.6%	-16.7%	-17.4%	-17.4%
Spotify	SPOT	2,057,741,009	Spotify	508,721,833	511,458,271	510,461,268	8.7%	6.6%	7.0%	7.0%
Paramount	PARA	420,709,658	Paramount+, BET+, Pluto, Noggin	29,976,014	30,003,067	29,364,562	-2.0%	-7.1%	-8.4%	-8.4%
Comcast	CMCSA	80,414,639	Peacock	9,563,471	9,472,436	9,476,666	-10.9%	-11.2%	-1.9%	-1.9%
<b>FAANG</b>										
	Ticker	Cume Downloads <sup>1</sup>	Key Services Measured							
Amazon	AMZN	1,084,213,984	Amazon Prime, Amazon Music	118,772,956	119,286,947	118,575,052	-3.3%	-1.1%	0.7%	0.7%
Apple	AAPL	116,282,874	Apple Music	8,577,278	8,598,547	8,395,932	-1.4%	-3.5%	-4.1%	-4.1%
Google	GOOGL	756,709,549	YouTube TV, YouTube Music	375,441,863	393,500,859	391,729,840	13.8%	15.4%	16.6%	16.6%
Netflix	NFLX	1,712,323,846	Netflix	304,755,382	312,077,262	311,170,259	-10.0%	-11.4%	-11.6%	-11.6%

### Notes:

1. Cume Downloads represents total cumulative app downloads as measured on Apple iOS and Android-enabled mobile and tablet devices, 2012-present; does not include connected TV or PC app downloads; figures do not represent active or paying subscribers
2. Subs represents either publicly disclosed or estimated subscribers to SVOD, AVOD or VMVPD services, where available; Pluto TV, Pandora and Spotify figures expressed in terms of monthly active users (MAUs); Paramount+ represent U.S. subs; discovery+/Dplay represent all next-gen subscribers
3. AVOD = advertising-supported video-on-demand, SVOD = subscription video-on-demand, VMVPD = virtual multichannel video programming distributor
4. Active user analysis is done over a panel of >10mn users using a diverse set of multiple apps. An MAU is defined as user with at least one session in a month. A session refers to any event where a user opens an app in the foreground of their device longer than 2 seconds.
5. Y/Y Chg. In MAUs represents the year-over-year change in MAUs vs. the prior year period; QTD represents the calendar quarter-to-date year-over-year change in downloads vs. the prior year period

Source: BofA Global Research, Sensor Tower

BofA GLOBAL RESEARCH

## Exhibit 8: Summary of Monthly Active User (MAU) Trends By Stream Media Service Type

Sensor Tower MAUs by company show mixed Y/Y results

	Streaming Service Profile					App MAUs By Month <sup>4</sup>			Y/Y Chg. In App MAUs By Month <sup>5</sup>				BoFA's Comment
Mass Appeal	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
Amazon Prime	AMZN	805,958,291	>200	\$15/mo.	SVOD	97,197,378	97,564,380	97,280,962	-0.1%	0.8%	2.8%	2.8%	
Disney+	DIS	531,278,309	150	\$7-14/mo.	AVOD/SVOD	96,193,907	96,910,140	96,402,823	-0.3%	-3.2%	-1.0%	-1.0%	
HBO Max/Max	WBD	316,962,917	nm	\$10-20/mo.	AVOD/SVOD	39,174,520	39,711,428	39,895,442	11.5%	10.7%	0.7%	0.7%	
Hulu	DIS	240,840,190	48	\$10-18/mo.	AVOD/SVOD/VMVPD	28,126,198	27,642,186	27,585,125	-15.7%	-15.0%	-12.8%	-12.8%	
Netflix	NFLX	1,712,323,846	260	\$7-23/mo.	AVOD/SVOD	304,755,382	312,077,262	311,170,259	-10.0%	-11.4%	-11.6%	-11.6%	
Paramount+	PARA	151,297,539	63	\$6-12/mo.	AVOD/SVOD	11,989,605	12,270,374	11,607,276	23.2%	7.8%	-11.7%	-11.7%	
Peacock	CMCSA	80,414,639	24	\$6-12/mo.	AVOD/SVOD	9,563,471	9,472,436	9,476,666	-10.9%	-11.2%	-1.9%	-1.9%	Peacock hosted an NFL playoff game exclusively on 1/13
TOTAL	--	3,839,075,731	-822	--	--	587,000,461	595,648,206	593,418,553	-5.5%	-6.9%	-7.0%	-7.0%	
Premium	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
MGM+	MGM	5,026,098	nm	\$6/mo.	SVOD	95,684	97,649	88,205	130.3%	166.4%	18.2%	18.2%	
STARZ	LGE	65,407,525	27	\$9/mo.	SVOD	1,550,130	1,596,333	1,375,298	-23.2%	-26.6%	-38.5%	-38.5%	
TOTAL	--	70,433,623	-22	--	--	1,645,814	1,693,982	1,463,503	-20.1%	-23.4%	-36.7%	-36.7%	
Mid-tier	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
BET+	PARA	12,879,146	2	\$6-10/mo.	AVOD/SVOD	169,310	153,069	184,430	-15.5%	-9.6%	-4.2%	-4.2%	
Noggin	PARA	20,304,764	3	\$8/mo.	AVOD/SVOD	466,272	451,378	448,523	-18.4%	-32.1%	-29.1%	-29.1%	
Pluto TV	PARA	227,069,154	79	Free	AVOD	17,137,465	16,924,259	16,918,567	-13.0%	-14.1%	-4.5%	-4.5%	
Sling TV	DISH	27,808,256	2	\$35-50/mo.	VMVPD	1,380,234	1,399,064	1,483,485	38.9%	46.3%	54.2%	54.2%	
YouTube TV	GOOGL	58,844,075	4	\$65/mo.	VMVPD	4,766,104	4,781,505	4,801,384	-1.0%	-0.2%	1.3%	1.3%	
Tubi	FOX	201,766,770	nm	Free	AVOD	12,488,530	12,297,735	12,455,116	1.8%	1.2%	-2.5%	-2.5%	
TOTAL	--	548,672,165	91	--	--	36,407,915	36,007,010	36,291,505	-5.5%	-6.3%	-2.0%	-2.0%	
Niche	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
Acorn TV	AMCX	1,459,557	>1	\$5/mo.	SVOD	25,242	21,340	19,937	-35.3%	-42.9%	-46.6%	-46.6%	
Food Network Kitchen	WBD	16,624,949	nm	\$7/mo.	AVOD/SVOD	25,020	25,189	25,694	-31.2%	-25.1%	-26.0%	-26.0%	
Shudder	AMCX	5,002,016	>1	\$5/mo.	SVOD	74,668	64,679	60,607	-27.6%	-27.9%	-29.6%	-29.6%	
UMC	AMCX	2,401,370	nm	\$5/mo.	SVOD	39,840	38,466	34,872	-28.4%	-35.9%	-51.7%	-51.7%	
TOTAL	--	25,487,892	nm	--	--	164,770	149,674	141,110	-29.6%	-32.2%	-38.8%	-38.8%	
U.S. Sports/News	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
CBSN	PARA	9,159,055	nm	Free	AVOD	213,362	203,987	205,766	-43.1%	-43.9%	-42.5%	-42.5%	
ESPN+	DIS	129,062,341	25	\$10/mo.	SVOD/LIVE	15,134,831	14,367,360	14,449,290	1.1%	5.8%	1.1%	1.1%	
Fox Nation	FOX	5,368,528	nm	\$6/mo.	SVOD/LIVE	106,918	99,199	98,649	-27.2%	-15.9%	-0.2%	-0.2%	
TOTAL	--	143,589,924	25	--	--	15,455,111	14,670,546	14,753,705	-0.2%	4.3%	0.0%	0.0%	
International	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
Eurosport Player	WBD	11,066,215	nm	£7/mo.	SVOD/LIVE	22,322	21,243	29,400	-72.5%	-72.1%	-62.9%	-62.9%	
DAZN	nm	72,851,203	nm	\$20/mo.	AVOD/SVOD	5,415,511	5,525,886	5,309,872	6.4%	41.8%	3.1%	3.1%	
F1 TV	FWONK	11,643,500	nm	\$3-10/mo.	SVOD/LIVE	839,591	691,234	678,859	35.8%	32.5%	28.7%	28.7%	
MANU App	MANU	15,546,813	nm	Free	Ad-Supported/Pay	3,203,359	3,362,724	3,202,974	6.4%	10.4%	1.3%	1.3%	
Discovery+/Dplay	WBD	66,367,734	nm	\$5-7/mo.	AVOD/SVOD	3,625,179	3,408,734	3,264,346	-22.9%	-20.3%	-29.2%	-29.2%	
TOTAL	--	177,475,465	-24	--	--	13,105,962	13,009,821	12,485,451	-2.9%	10.0%	-7.7%	-7.7%	
Music	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	Category <sup>3</sup>	Nov. 2023	Dec. 2023	Jan. 2024	Nov. 2023	Dec. 2023	Jan. 2024	QTD	
Amazon Music	AMZN	278,255,693	55	\$8-10/mo.	Ad-Supported/Pay	21,575,578	21,722,567	21,294,090	-15.5%	-9.1%	-7.9%	-7.9%	
Apple Music	AAPL	116,282,874	>78	\$10/mo.	Pay	8,577,278	8,598,547	8,395,932	-1.4%	-3.5%	-4.1%	-4.1%	
iHeart Radio	IHRT	139,221,393	nm	\$5-10/mo.	Ad-Supported/Pay	2,814,101	2,849,206	2,743,638	-15.8%	-4.2%	-7.0%	-7.0%	
Pandora	SIRI	333,513,596	55	\$5-10/mo.	Ad-Supported/Pay	24,983,854	24,176,506	23,955,999	-16.4%	-18.7%	-19.0%	-19.0%	
Sirius XM App	SIRI	51,114,309	nm	\$13/mo.	Pay	4,086,658	4,011,885	3,824,662	-1.1%	-2.9%	-5.8%	-5.8%	
Spotify	SPOT	2,057,741,009	520	\$11/mo.	Ad-Supported/Pay	508,721,833	511,458,271	510,461,268	8.7%	6.6%	7.0%	7.0%	
YouTube Music	GOOGL	697,865,474	50	\$10/mo.	Pay	370,675,759	388,719,354	386,928,456	14.0%	15.6%	16.8%	16.8%	
TOTAL	--	3,673,994,348	680	--	--	941,435,061	961,536,336	957,604,045	8.9%	8.6%	9.2%	9.2%	

### Notes:

1. Cume Downloads represents total cumulative app downloads as measured on Apple iOS and Android-enabled mobile and tablet devices, 2012-present; does not include connected TV or PC app downloads; figures do not represent active or paying subscribers.
2. Subs represents either publicly disclosed or estimated subscribers to SVOD, AVOD or VMVPD services, where available; Pluto TV, Pandora and Spotify figures expressed in terms of monthly active users (MAUs); Paramount+ represent U.S. subs; discovery+/Dplay represent all next-gen subscribers.
3. AVOD = advertising-supported video-on-demand; SVOD = subscription video-on-demand; VMVPD = virtual multichannel video programming distributor.
4. Active user analysis is done over a panel of >10mm users using a diverse set of apps. An MAU is defined as user with at least one session in a month. A session refers to any event where a user opens an app in the foreground of their device longer than 2 seconds.
5. Y/Y Chg. In MAUs represents the year-over-year change in MAUs vs. the prior year period; QTD represents the calendar quarter-to-date year-over-year change in downloads vs. the prior year period.

Source: BoFA's Global Research, Sensor Tower, Company Reports, Press Reports





**Exhibit 9: Summary of Monthly Active User (MAU) Trends By Stream Media Service Type**

Sensor Tower MAUs by company show mixed Y/Y growth

	Streaming Service Profile						Y/Y Change In App MAUs By Month <sup>4,5</sup>												
Mass Appeal	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	iOS Rating <sup>3</sup>	Andr. Rating <sup>3</sup>	Feb. 2023	Mar. 2023	Apr. 2023	May 2023	Jun. 2023	Jul. 2023	Aug. 2023	Sep. 2023	Oct. 2023	Nov. 2023	Dec. 2023	Jan. 2024	
Amazon Prime	AMZN	805,958,291	>200	\$15/mo.	4.8	4.2	-4.4%	4.6%	2.1%	0.9%	0.1%	2.1%	4.0%	-1.4%	0.8%	-0.1%	0.8%	2.8%	
Disney+	DIS	531,278,309	150	\$7-14/mo.	4.6	4.4	9.5%	5.7%	6.7%	4.0%	-2.2%	-0.2%	-2.0%	-3.3%	0.7%	-0.3%	-3.2%	-1.0%	
HBO Max/Max	WBD	316,962,917	nm	\$10-20/mo.	4.9	4.7	18.7%	14.5%	4.4%	44.3%	33.0%	18.2%	4.3%	-4.6%	1.7%	11.5%	10.7%	0.7%	
Hulu	DIS	240,840,190	48	\$10-18/mo.	4.6	4.5	-13.6%	-11.7%	-16.0%	-13.7%	-11.7%	-12.6%	-15.9%	-21.2%	-18.6%	-15.7%	-15.0%	-12.8%	
Netflix	NFLX	1,712,323,846	260	\$7-23/mo.	3.7	4.3	-7.1%	-6.7%	-7.2%	-6.3%	-6.8%	-9.4%	-9.7%	-9.9%	-9.6%	-10.0%	-11.4%	-11.6%	
Paramount+	PARA	151,297,539	63	\$6-12/mo.	4.6	3.8	96.7%	69.1%	57.5%	50.7%	40.8%	38.2%	35.1%	28.4%	27.5%	23.2%	7.8%	-11.7%	
Peacock	CMCSA	80,414,639	24	\$6-12/mo.	4.6	4.5	-18.2%	6.6%	23.9%	15.0%	18.5%	9.9%	6.6%	-4.2%	4.2%	-10.9%	-11.2%	-1.9%	
TOTAL	--	3,839,075,731	-822	--	--	--	-2.5%	-1.3%	-2.4%	-0.3%	-2.3%	-4.1%	-5.2%	-7.2%	-5.4%	-5.5%	-6.9%	-7.0%	
Premium	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	iOS Rating <sup>3</sup>	Andr. Rating <sup>3</sup>	Feb. 2023	Mar. 2023	Apr. 2023	May 2023	Jun. 2023	Jul. 2023	Aug. 2023	Sep. 2023	Oct. 2023	Nov. 2023	Dec. 2023	Jan. 2024	
MGM+	MGM	5,026,098	nm	\$6/mo.	4.8	4.1	75.3%	44.3%	35.8%	49.1%	132.6%	88.1%	90.6%	160.8%	221.0%	130.3%	166.4%	18.2%	
STARZ	LGE	65,407,525	27	\$9/mo.	4.8	4.0	-31.1%	-27.2%	-21.0%	-22.5%	-40.2%	-37.9%	-40.9%	-32.7%	-29.6%	-23.2%	-26.6%	-38.5%	
TOTAL	--	70,433,623	-27	--	--	--	-29.5%	-26.0%	-19.5%	-20.3%	-37.0%	-35.9%	-38.9%	-30.0%	-25.7%	-20.1%	-23.4%	-36.7%	
Mid-tier	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	iOS Rating <sup>3</sup>	Andr. Rating <sup>3</sup>	Feb. 2023	Mar. 2023	Apr. 2023	May 2023	Jun. 2023	Jul. 2023	Aug. 2023	Sep. 2023	Oct. 2023	Nov. 2023	Dec. 2023	Jan. 2024	
BET+	PARA	12,879,146	2	\$6-10/mo.	3.8	3.6	101.1%	57.5%	22.4%	1.2%	-24.0%	-15.5%	9.8%	8.6%	-42.8%	-15.5%	-9.6%	-4.2%	
Noggin	PARA	20,304,764	3	\$8/mo.	3.6	3.5	-25.3%	-19.8%	-22.7%	-27.5%	-22.5%	-24.5%	-27.9%	-30.1%	-30.2%	-18.4%	-32.1%	-29.1%	
Pluto TV	PARA	227,069,154	79	Free	4.8	3.9	8.0%	26.2%	18.3%	19.9%	7.4%	3.7%	1.5%	1.6%	-5.3%	-13.0%	-14.1%	-4.5%	
Sling TV	DISH	27,808,256	2	\$35-50/mo.	4.6	3.8	16.7%	16.3%	28.0%	35.7%	49.2%	71.5%	48.6%	41.6%	36.1%	38.9%	46.3%	54.2%	
YouTube TV	GOOGL	58,844,075	4	\$65/mo.	4.0	3.8	17.1%	19.6%	10.8%	6.6%	6.3%	8.6%	9.1%	11.5%	7.4%	-1.0%	-0.2%	1.3%	
Tubi	FOX	201,766,770	nm	Free	4.7	4.8	2.8%	2.7%	4.7%	6.4%	11.8%	11.4%	7.3%	6.2%	4.3%	1.8%	1.2%	-2.5%	
TOTAL	--	548,672,165	91	--	--	--	6.9%	15.7%	11.7%	12.7%	8.9%	7.5%	4.7%	4.8%	-0.2%	-5.5%	-6.3%	-2.0%	
Niche	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	iOS Rating <sup>3</sup>	Andr. Rating <sup>3</sup>	Feb. 2023	Mar. 2023	Apr. 2023	May 2023	Jun. 2023	Jul. 2023	Aug. 2023	Sep. 2023	Oct. 2023	Nov. 2023	Dec. 2023	Jan. 2024	
Acorn TV	AMCX	1,459,557	>1	\$5/mo.	4.6	4.3	-27.9%	-29.0%	-33.5%	-35.6%	-34.2%	-33.9%	-38.8%	-35.7%	-37.4%	-35.3%	-42.9%	-46.6%	
Food Network Kitchen	WBD	16,624,949	nm	\$7/mo.	4.8	4.3	-46.2%	-35.4%	-19.9%	-39.2%	-49.3%	-42.5%	-52.1%	-27.3%	-27.9%	-31.2%	-25.1%	-26.0%	
Shudder	AMCX	5,002,016	>1	\$5/mo.	4.6	4.4	-16.0%	-20.5%	-25.9%	-37.0%	-34.6%	-28.6%	-38.0%	-26.5%	-39.2%	-27.6%	-27.9%	-29.6%	
UMC	AMCX	2,401,370	nm	\$5/mo.	2.3	3.2	-18.2%	-21.9%	-37.0%	-45.4%	-44.9%	-48.6%	-34.6%	-0.8%	-20.7%	-28.4%	-35.9%	-51.7%	
TOTAL	--	25,487,892	nm	--	--	--	-24.6%	-24.9%	-30.2%	-39.9%	-39.9%	-37.9%	-38.9%	-21.6%	-33.2%	-29.6%	-32.2%	-38.8%	
U.S. Sports/News	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	iOS Rating <sup>3</sup>	Andr. Rating <sup>3</sup>	Feb. 2023	Mar. 2023	Apr. 2023	May 2023	Jun. 2023	Jul. 2023	Aug. 2023	Sep. 2023	Oct. 2023	Nov. 2023	Dec. 2023	Jan. 2024	
CBSN	PARA	9,159,055	nm	Free	4.0	4.3	-26.9%	-27.1%	-26.8%	-34.6%	-33.6%	-35.7%	-35.0%	-42.0%	-38.6%	-43.1%	-43.9%	-42.5%	
ESPN+	DIS	129,062,341	25	\$10/mo.	4.4	3.8	2.0%	-1.2%	1.1%	-2.3%	-1.9%	0.8%	-1.6%	-0.7%	1.4%	1.1%	5.8%	1.1%	
Fox Nation	FOX	5,368,528	nm	\$6/mo.	4.6	3.5	-20.0%	-23.8%	-13.9%	-20.9%	-28.3%	-25.7%	-23.0%	8.0%	-7.0%	-27.2%	-15.9%	-0.2%	
TOTAL	--	143,589,924	25	--	--	--	0.8%	-2.3%	0.2%	-3.5%	-3.1%	-0.7%	-2.9%	-1.7%	0.4%	-0.2%	4.3%	0.0%	
International	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	iOS Rating <sup>3</sup>	Andr. Rating <sup>3</sup>	Feb. 2023	Mar. 2023	Apr. 2023	May 2023	Jun. 2023	Jul. 2023	Aug. 2023	Sep. 2023	Oct. 2023	Nov. 2023	Dec. 2023	Jan. 2024	
Eurosport Player	WBD	11,066,215	nm	E7/mo.	4.5	3.6	-60.7%	-55.2%	-59.5%	-70.0%	-68.3%	-63.4%	-65.3%	-73.2%	-72.3%	-72.5%	-72.1%	-62.9%	
DAZN	nm	72,851,203	nm	\$20/mo.	4.6	4.0	-15.0%	-13.0%	-9.9%	-11.8%	5.5%	-6.4%	-11.2%	-2.6%	8.1%	6.4%	41.8%	3.1%	
F1 TV	FWONK	11,643,500	nm	\$3-10/mo.	2.4	3.1	65.0%	48.1%	59.5%	31.1%	28.2%	15.6%	21.2%	36.4%	19.8%	35.8%	32.5%	28.7%	
MANU App	MANU	15,546,813	nm	Free	3.9	4.7	34.1%	29.6%	36.5%	36.3%	28.3%	9.7%	14.4%	12.7%	0.0%	6.4%	10.4%	1.3%	
Discovery+/Dplay	WBD	66,367,734	nm	\$5-7/mo.	4.9	4.7	-30.2%	-24.4%	-32.5%	-31.6%	-38.8%	-34.5%	-33.2%	-26.1%	-23.9%	-22.9%	-20.3%	-29.2%	
TOTAL	--	177,475,465	nm	--	--	--	-11.6%	-7.7%	-9.1%	-10.3%	-9.7%	-12.8%	-12.7%	-6.3%	-4.8%	-2.9%	10.0%	-7.7%	
Music	Ticker	Cume Downloads <sup>1</sup>	Subs <sup>2</sup>	Cost	iOS Rating <sup>3</sup>	Andr. Rating <sup>3</sup>	Feb. 2023	Mar. 2023	Apr. 2023	May 2023	Jun. 2023	Jul. 2023	Aug. 2023	Sep. 2023	Oct. 2023	Nov. 2023	Dec. 2023	Jan. 2024	
Amazon Music	AMZN	278,255,693	55	\$8-10/mo.	4.7	4.3	-7.7%	-7.4%	-7.4%	-8.5%	-8.9%	-10.1%	-10.9%	-10.5%	-9.4%	-15.5%	-9.1%	-7.9%	
Apple Music	AAPL	116,282,874	>78	\$10/mo.	nm	3.9	7.9%	8.1%	4.7%	3.8%	4.3%	1.0%	-2.0%	-0.8%	-4.9%	-1.4%	-3.5%	-4.1%	
iHeart Radio	IHRT	139,221,393	nm	\$5-10/mo.	4.6	4.6	-23.9%	-16.4%	-18.1%	-15.5%	-7.5%	-23.1%	-18.5%	-20.4%	-19.4%	-15.8%	-4.2%	-7.0%	
Pandora	SIRI	333,513,596	55	\$5-10/mo.	4.8	4.3	-20.1%	-22.2%	-21.7%	-21.6%	-20.4%	-20.9%	-18.0%	-18.6%	-17.0%	-16.4%	-18.7%	-19.0%	
Sirius XM App	SIRI	51,114,309	nm	\$13/mo.	4.8	4.8	3.3%	6.0%	4.1%	2.3%	4.1%	0.2%	2.4%	-0.5%	-3.3%	-1.1%	-2.9%	-5.8%	
Spotify	SPOT	2,057,741,009	520	\$11/mo.	4.8	4.4	14.9%	14.7%	13.9%	15.2%	14.5%	12.7%	11.6%	10.9%	10.3%	8.7%	6.6%	7.0%	
YouTube Music	GOOGL	697,865,474	50	\$10/mo.	4.8	4.5	15.1%	13.0%	13.7%	13.5%	14.5%	14.5%	11.7%	11.7%	13.8%	14.0%	15.6%	16.8%	
TOTAL	--	3,673,994,348	680	--	--	--	12.3%	11.5%	11.3%	12.0%	12.1%	9.9%	9.5%	9.7%	9.8%	8.9%	8.6%	9.2%	

**Notes:**

1. Cume Downloads represents total cumulative app downloads as measured on Apple iOS and Android-enabled mobile and tablet devices, 2012-present; does not include connected TV or PC app downloads; figures do not represent active or paying subscribers;

2. Subs represents either publicly disclosed or estimated subscribers to SVOD, AVOD or VMVPD services, where available; Pluto TV, Pandora and Spotify figures expressed in terms of monthly active users (MAUs); Paramount+ represent U.S. subs; discovery+/Dplay represent all next-gen subscribers;

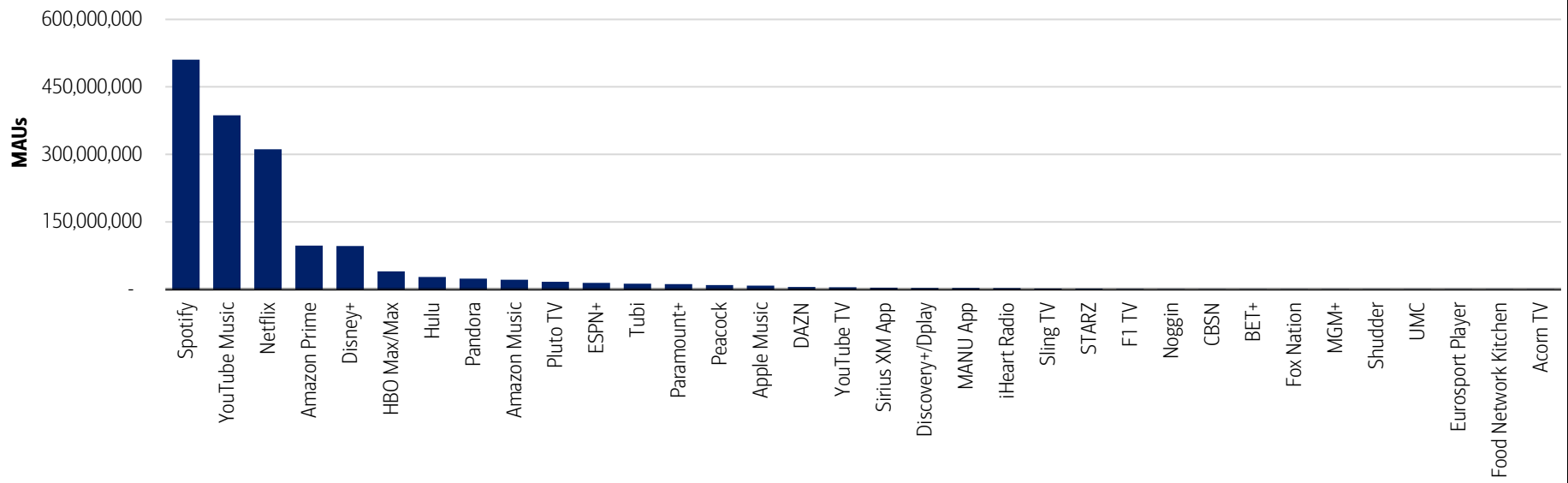
3. AVOD = advertising-supported video-on-demand, SVOD = subscription video-on-demand, VMVPD = virtual multichannel video programming distributor;

4. App Downloads By Month represents total monthly app downloads as measured on Apple iOS and Android-enabled mobile and tablet devices, does not include connected TV or PC app downloads; figures do not represent active or paying subscribers;

5. Y/Y Chg In App Downloads By Month represents the year-over-year change in monthly downloads vs. the prior year period; QTD represents the calendar quarter-to-date year-over-year change in downloads vs. the prior year period

**Source:** BofA Global Research, Sensor Tower, Company Reports, Press Reports

**Exhibit 10: Streaming media services worldwide MAUs, current month**  
Sensor Tower MAUs by service



Source: BofA Global Research, Sensor Tower

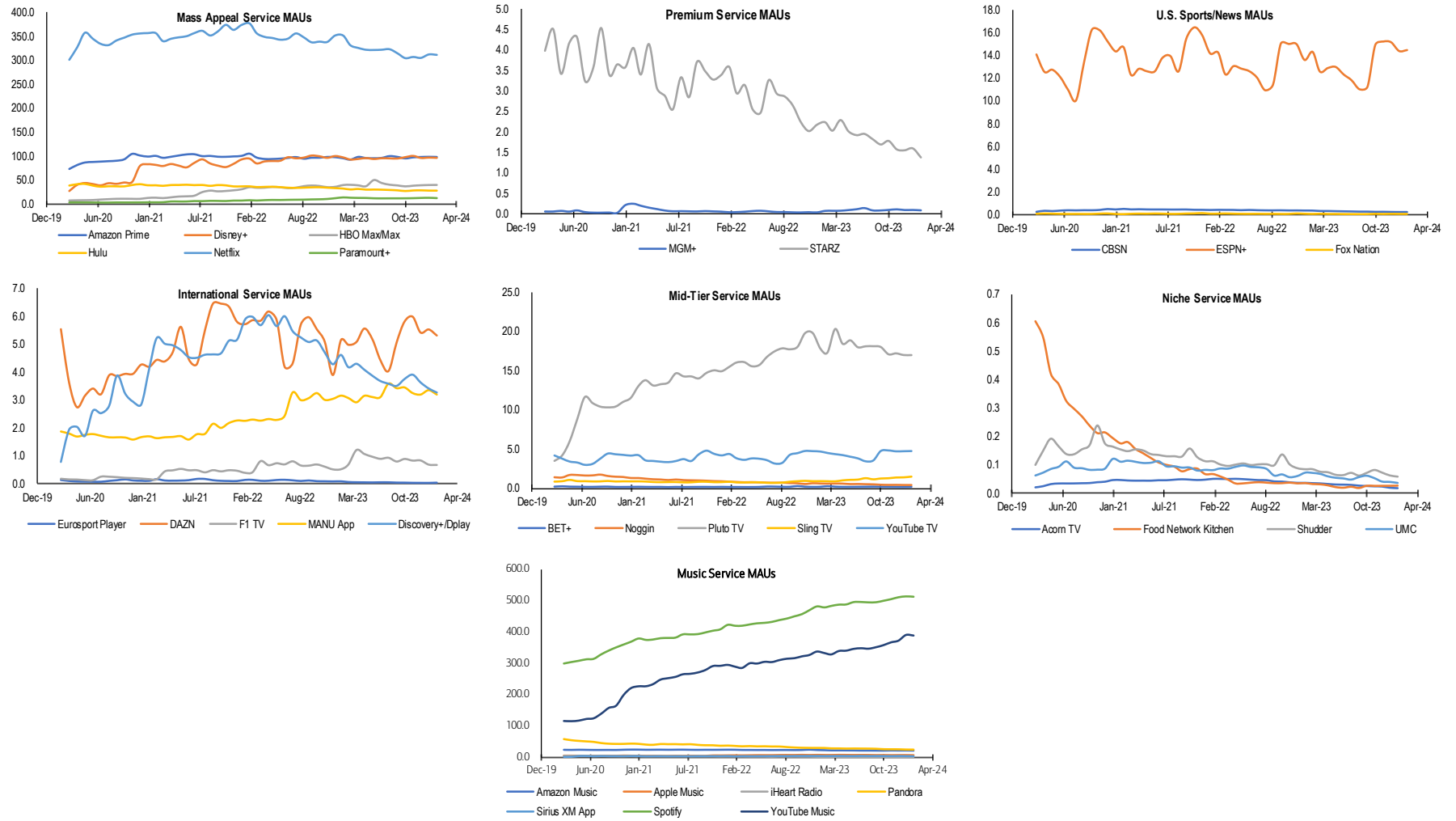
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## Exhibit 11: Total worldwide MAUs (millions)

Sensor Tower MAUs by service



Source: BofA Global Research, Sensor Tower

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# Key Content Releases

## Exhibit 12: Select current month programming critical reception scores

Critical reception scores by program show strong results

Original Content Description		Streaming Service Profile		Critical Reception <sup>1</sup>	
Premiere Date	Title	Service Name	Ticker/Company	User Rating	Metascore
1/30/24	NASCAR: Full Speed: Season 1	Netflix	NFLX	tbd	tbd
1/29/24	Next Level Chef: Season 3	Hulu	DIS	tbd	tbd
1/29/24	The Greatest Night in Pop	Netflix	NFLX	6.8	69
1/28/24	R.M.N.	Hulu	DIS	7.7	81
1/27/24	Doctor Slump: Season 1	Netflix	NFLX	tbd	tbd
1/26/24	Expats	Prime Video	AMZN	4.5	73
1/26/24	Badland Hunters	Netflix	NFLX	tbd	tbd
1/26/24	You Hurt My Feelings	Paramount+	PARA	6.2	80
1/26/24	Masters of the Air	Apple TV+	AAPL	7	73
1/25/24	In the Know: Season 1	Peacock	CMCSA	tbd	69
1/25/24	Mission: Impossible - Dead Reckoning	Paramount+	PARA	8	81
1/25/24	Griselda	Netflix	NFLX	4.7	64
1/25/24	Masters of the Universe: Revolution	Netflix	NFLX	4.8	tbd
1/25/24	Chrissy & Dave Dine Out: Season 1	Hulu	DIS	tbd	tbd
1/24/24	A Real Bug's Life: Season 1	Disney+	DIS	tbd	tbd
1/24/24	Queer Eye: Season 8	Netflix	NFLX	tbd	tbd
1/24/24	Tell Me That You Love Me: Season 1	Hulu	DIS	tbd	tbd
1/22/24	Rick and Morty: Season 7	Max	WBD	5.2	73
1/22/24	Royal Pains: Season 1-Season 8	Netflix	NFLX	6.9	64
1/21/24	OWN Spotlight: Oprah & Danielle Brooks	Max	WBD	tbd	tbd
1/20/24	Lincoln: Divided We Stand	Max	WBD	tbd	tbd
1/19/24	Law & Order: Season 23	Peacock	CMCSA	tbd	tbd
1/19/24	The Baker	Hulu	DIS	tbd	tbd
1/19/24	The Kitchen	Netflix	NFLX	5.4	66
1/19/24	The Woman in the Wall	Paramount+	PARA	4.8	73
1/19/24	Real Time with Bill Maher: Season 22	Max	WBD	tbd	tbd
1/19/24	Dance Life: Season 1	Prime Video	AMZN	tbd	tbd
1/19/24	Hazbin Hotel: Season 1	Prime Video	AMZN	7.3	69
1/19/24	The Other Zoey	Prime Video	AMZN	tbd	tbd
1/19/24	Zorra: Season 1	Prime Video	AMZN	tbd	tbd
1/18/24	Nope	Peacock	CMCSA	6.2	77
1/18/24	Invisible Beauty	Hulu	DIS	tbd	72
1/18/24	On the Roam: Season 1	Max	WBD	tbd	tbd
1/17/24	After Midnight: Season 1	Paramount+	PARA	tbd	tbd
1/17/24	American Nightmare	Netflix	NFLX	6.3	76
1/17/24	End of the Line: Season 1	Netflix	NFLX	tbd	tbd
1/17/24	Inside the NFL: Season 46	Netflix	NFLX	tbd	tbd
1/16/24	June	Paramount+	PARA	tbd	tbd
1/16/24	Dusty Slay: Workin' Man	Netflix	NFLX	tbd	tbd
1/14/24	OWN Spotlight: Oprah & Fantasia Barrino	Max	WBD	tbd	tbd
1/14/24	True Detective: Season 4	Max	WBD	4.8	81
1/12/24	Killers of the Flower Moon	Apple TV+	AAPL	7.7	89
1/12/24	The Traitors: Season 2	Peacock	CMCSA	tbd	tbd
1/12/24	Love Is Blind: Sweden: Season 1	Netflix	NFLX	tbd	tbd
1/12/24	Bluey: 10 new episodes	Disney+	DIS	tbd	tbd
1/11/24	Mrs. Harris Goes to Paris	Peacock	CMCSA	6.5	70
1/11/24	SkyMed: Season 2	Paramount+	PARA	tbd	tbd
1/11/24	Boy Swallows Universe: Season 1	Netflix	NFLX	8.5	68
1/10/24	Criminal Record	Apple TV+	AAPL	7.7	73
1/10/24	Break Point: Season 2	Netflix	NFLX	tbd	tbd
1/9/24	Beyond Utopia	Hulu	DIS	tbd	84



## Exhibit 12: Select current month programming critical reception scores

Critical reception scores by program show strong results

Original Content Description		Streaming Service Profile		Critical Reception <sup>1</sup>	
1/9/24	Echo	Disney+	DIS	5.4	62
1/9/24	Pete Davidson: Turbo Fonzarelli	Netflix	NFLX	tbd	tbd
1/9/24	The Passenger	Prime Video	AMZN	6.3	62
1/8/24	Going to Mars: The Nikki Giovanni Project	Max	WBD	tbd	73
1/8/24	This Is Us: Season 1-Season 6	Netflix	NFLX	7.5	76
1/7/24	OWN Spotlight: Oprah & Taraji P. Henson	Max	WBD	tbd	tbd
1/7/24	Home Town: Season 8	Max	WBD	tbd	tbd
1/5/24	OWN Celebrates the New Color Purple	Max	WBD	tbd	tbd
1/5/24	James May: Our Man in India	Prime Video	AMZN	tbd	tbd
1/4/24	The Brothers Sun: Season 1	Netflix	NFLX	7.7	61
1/4/24	Society of the Snow	Netflix	NFLX	8.2	72
1/4/24	Northern Exposure: Season 1-Season 6	Prime Video	AMZN	7.6	83
1/3/24	The Floor: Season 1	Hulu	DIS	tbd	tbd
1/3/24	Good Trouble: Season 5B	Hulu	DIS	tbd	tbd
1/3/24	Alice's Wonderland Bakery: Season 2	Disney+	DIS	tbd	tbd
1/1/24	Bitconned	Netflix	NFLX	4.5	tbd
1/1/24	One Piece: Season 20	Netflix	NFLX	tbd	tbd
1/1/24	Marry My Husband: Season 1	Netflix	NFLX	tbd	tbd
1/1/24	HGTV Dream Home 2024	Max	WBD	tbd	tbd
1/1/24	Kids Baking Championship: Season 12	Max	WBD	tbd	tbd
1/1/24	The Changemakers	Paramount+	PARA	tbd	tbd

**Note:** User ratings represent audience scores from Metacritic's website; Metascore is a weighted average of reviews from top critics and publications for a given program.

**Source:** BofA Global Research, Metacritic

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster <sup>R1</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R1</sup> 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.

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