

Interactive Media - Korea

Mobile Game Tracker: Jan 2024 bookings down 21% YoY

Industry Overview

Jan-2024 mobile game tracker

We track monthly/quarterly revenue of 200+ mobile games across the six game stocks in our coverage (NC, Krafton, Netmarble, KG, PA, and Com2uS) on Sensor Tower (ST). We believe the data series below could provide intra-quarter reads on YoY or MoM trends of the companies' revenue. Nevertheless, we caution there could be discrepancies with the actual numbers, given 1) the data track mobile only, not PC/ console; 2) the data capture self-published titles only, and thus exclude royalty revenue; 3) historically, we note ST has not captured 100% of official mobile revenue, but only c.50-70%, based on our analysis; and 4) ST reports USD-based bookings, while Korea firms print quarterly results in KRW.

Jan mobile bookings down 21% YoY

Monthly mobile game bookings were down 21% YoY in Jan, reporting a worse period vs. 4Q23 (-4% YoY). The Jan figure was down 14% vs. 4Q23 monthly average. The visibility on Korea mobile game market remains low, in our view. We are more cautious on game developers with relatively weak pipelines. We prefer high-quality developers/ publishers with resilient revenue upside for the western PC/console market.

Jan mobile bookings down 14% vs. 4Q23 monthly average

NC: Mobile bookings fell 14% in Jan vs. 4Q monthly average. The figure was down 31% YoY vs. down 14% YoY in 4Q. *LM/ LW/ L2M* all declined 10%/ 6%/ 31%, respectively, vs. 4Q. Krafton: Down 5% vs. 4Q. Self-published *PUBG Mobile* down 4% vs. 4Q. It was up 119% YoY, continuing its solid trend after *BGMI* resumption in May. *Peacekeeper Elite* and Tencent-published *PUBG Mobile* down 42% YoY/ 18% vs. 4Q. Netmarble: Down 14% vs. 4Q. *Jackpot World/ Lotsa Slots/ Cash Frenzy*, social casino titles, saw +1%/ -1%/ +4% changes vs. 4Q. *The Seven Deadly Sins* rose 18% vs. 4Q. KG: Down 20% vs. 4Q. *Odin* fell 14% vs. 4Q23 due to high base (large-scale update on 20 Dec). *ArcheAge War/ Ares/ Uma Musume* also declined 35%/ 34%/ 46% vs. 4Q. PA: BDM up 13% vs. 4Q, following a new PvP content update on 16 Jan. Com2uS: Down 13% vs. 4Q. *Sky Arena* fell 12% vs. 4Q. *MLB 9 Innings/ MLB 9 Innings Rivals*, Com2uS' baseball titles, also declined 10%/ 10%, respectively, vs. 4Q.

Expect expansion to console in 2024

Several major Korea game developers plan to expand to the console platform in 2024. Separately, on 1 Feb, the Chinese government approved licenses to three Korean titles, including Netmarble's *The King of Fighters Allstar*. Major titles that are to be available on the console include: **NC** – *TL* in line with its global launch (2024); **Krafton** – *inZOI*, a life simulation title unveiled at G-Star 2023 (2H24); **Netmarble** – official launch of *Paragon: The Overprime* (TPS/ MOBA; 2024); **Com2uS** – publishing *The Starlight*, an MMORPG developed with Unreal Engine 5 (1H25); **PA** – the launch schedule of *Crimson Desert* is not yet confirmed.

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Refer to important disclosures on page 12 to 14.

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Glossary

NC: NCSOFT KG: Kakao Games PA: Pearl Abyss LM: Lineage M LW: Lineage W L2M: Lineage 2M

BGMI: Battlegrounds Mobile India BDM: Black Desert Mobile TPS: third-person shooter MOBA: multiplayer online battle

arena

MMORPG: massively multiplayer online role-playing game

See our BofA reports:

Mobile Game Tracker: Korea -10%, North America +47%, Japan -38% in Jan-2024 (15 Feb 2024)

Korea Internet: Year Ahead 2024 (16 Jan 2024)

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Jan 2024 mobile game tracker

Bookings stable since Oct-2022

We track monthly/quarterly revenues of 200+ mobile games across the six game stocks in our coverage – NCSOFT (NC), Krafton, Netmarble, Kakao Games (KG), Pearl Abyss (PA), and Com2uS – on ST. Jan 2024 aggregated mobile bookings of the six companies were - 21% YoY, worsening from -5% YoY in 4Q23. The figure was down 14% vs. 4Q23 monthly average. The visibility on Korea mobile game market remains low, in our view. We expect the Korea gaming market to also see some growth from the PC/ console market, driven by a series of blockbuster title launches in mid-2024.

Exhibit 1: Mobile gaming 3P bookings vs. Actual figures

Aggregated mobile bookings of the six companies decreased 21% YoY in Jan 2024, according to Sensor Tower data

Company	Mobile mix of revenue							Sens	or Tow	er YoY	growt	h ***							Company reported YoY growth****
	4Q23P	Jan '23	Feb '23	Mar '23	1Q23	Apr '23 I	May '23	Jun '23	2Q23	Jul '23	Aug '23	Sep '23	3Q23	Oct '23	Nov '23	Dec '23	4Q23	Jan '24	4Q23P
NCSOFT	68%	-49%	-54%	-51%	-51%	-38%	-49%	-33%	-40%	-30%	-47%	-42%	-40%	-19%	-10%	-12%	-14%	-31%	-22%
													+117				+135		
Krafton*	64%	-38%	-52%	-60%	-51%	-47%	-52%	+56%	-21%	+64%	+125%	+172%	%	+154%	+73%	+171%	%	+92%	+35%
- PUBG Mobile (Tencent)	NA	-12%	-27%	-20%	-19%	-17%	-31%	-22%	-23%	-2%	-22%	-10%	-12%	-13%	+4%	-5%	-5%	-42%	NA
Netmarble	92%	-13%	-6%	+2%	-6%	-6%	-12%	-15%	-11%	-21%	-16%	+8%	-10%	-2%	-9%	-10%	-7%	-17%	-4%
Kakao Games	66%	+9%	-19%	+25%	+3%	+9%	-30%	+6%	-5%	-14%	-1%	-8%	-8%	-31%	+22%	+25%	+1%	-38%	+4%
Pearl Abyss**	NA	-13%	-19%	-24%	-18%	-29%	-36%	-21%	-29%	-19%	-22%	-19%	-20%	-37%	-49%	-45%	-44%	-52%	NA
Com2uS	78%	-22%	-8%	+75%	+14%	+39%	+5%	+4%	+17%	+56%	+28%	-2%	+26%	+14%	+16%	+2%	+10%	+12%	-0%
Total	75%	-28%	-32%	-20%	-27%	-15%	-28%	-15%	-20%	-15%	-19%	-10%	-15%	-8%	-3%	-1%	-4%	-21%	-1%

Source: BofA Global Research estimates, Sensor Tower

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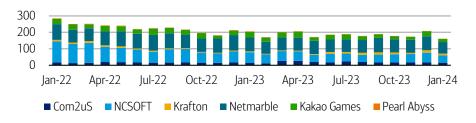
Exhibit 2: Mobile gaming 3P bookings comparison

In Jan 2024, it was down 14% vs. 4Q23 monthly average

		Quarterly		Annual					
Company	Jan '24 avg. bookings (US\$mn)	YoY growth	vs. 4Q23 monthly avg.	2023 avg. bookings (US\$mn)	2022 avg. bookings (US\$mn)	YoY growth			
NCSOFT	46	-31%	-14%	53	87	-39%			
Krafton*	10	+92%	-5%	9	7	+22%			
- PUBG Mobile (Tencent)	81	-42%	-18%	99	116	-15%			
Netmarble	70	-17%	-14%	80	87	-9%			
Kakao Games	21	-38%	-20%	29	30	-3%			
Pearl Abyss*	2	-52%	+13%	2	3	-27%			
Com2uS	15	+12%	-13%	19	16	+17%			
Total	163	-21%	-14%	191	230	-17%			

Source: Sensor Tower
* Excludes royalty revenue

Aggregate mobile bookings were US\$163mn in Jan (-21% YoY, -23% MoM)



Source: Sensor Tower



^{*} Excludes royalty revenue; ** Revenue by platform not provided by company; *** Based on Sensor Tower data provided in USS; **** Based on financial reports provided by each company in Korean Won

Exhibit 3: Korea mobile gaming - Monthly mobile bookings (US\$mn)

We believe this data series could provide intra-quarter reads on YoY or MoM trends of the companies' revenue. Nevertheless, we caution there could be discrepancies with actual revenue, given 1) the data track mobile only, not PC/ console; 2) the data capture self-published titles only, and thus exclude royalty revenue; and 3) historically, we note ST has not captured 100% of official mobile revenue, but only c.50-70%, based on our analysis.

ST conducts quarterly download/revenue data revisions designed to implement the most up-to-date models, tune parameters for key markets, and audit for accuracy degradation. These revisions impact historical data series (and YoY comps) and could result in differences vs. data history published in our previous reports. While the magnitude of impact varies across individual apps and geographies, on an aggregate level, these changes account for less than 0.5% of the App Store's total revenue.

Exhibit 4: Korea gaming - EventsKakao Games' R.O.M (MMORPG) will be globally launched on 27 Feb

Month	Company	Start	End	Title	Event				
Feb-24 Com2uS		2/1/2024	2/1/2024	Frostpunk: Beyond the Ice	Early access begins (US/ UK/ Philippines)				
	2/5/2024	2/5/2024	Starseed: Asnia Trigger	Pre-registration begins					
		2/8/2024		Com2uS Probaseball 2024	Log-in special reward events				
			2/13/2024	Ace Fishing: Crew	Extra reward events				
			2/15/2024	Summoners War: Sky Arena	Lunar New Year events incl. rewards				
			2/18/2024	Com2uS Probaseball V24	Batting event incl. rewards				
			2/14/2024	Com2uS Probaseball for Manager	Log-in special reward events				
			2/26/2024	Ace Fishing	In-game missions and events				
		2/9/2024	2/11/2024	Summoners War: Chronicles	Log-in special reward events				
		2/15/2024	TBD	BTS Cooking On: Tinytan	Pre-registration begins				
	NCSOFT	2/2/2024	2/4/2024	Throne & Liberty	Castle siege warfares				
		2/15/2024	2/15/2024	Trickster M / Probaseball H3	Ends services of Trickster M and Probaseball H3				
		2/25/2024	2/25/2024	Lineage W	Aden castle siege warfare				
	Krafton	2/1/2024	2/1/2024	Defense Derby	New season and character update				
		2/2/2024	2/3/2024	PUBG Mobile	Collaboration with LINE Friends (in-game characters)				
		2/5/2024	2/5/2024	Garuda Saga	Pre-registration begins (developed with Indian developer)				
	Netmarble	2/1/2024	2/1/2024	Modoo Marble	New map (Korea theme) update				
	, reciriarore	2/6/2024	TBD	Modoo Marble	Attendance & growth mission/event				
	27072021	2/6/2024	The King of Fighters Allstar	China license approval					
		2/13/2024	Grand Cross: Age of Titans	Lunar New Year attendance event					
			2/15/2024	Tower of God	New story event				
			2/16/2024	Seven Knights 2	Attendance and mission event				
			2/20/2024	Netmarble Pro Baseball 2024	Lunar New Year attendance event				
			2/21/2024	Ni no Kuni: Cross Worlds	New event with rewards				
			2/22/2024	MaguMagu 2024 Mobile	Attendance event and mission event				
			3/12/2024	A3: Still Alive	Lunar New Year special rewards event				
		2/8/2024	2/19/2024	Fate/Grand Order	Special login bonus event				
		2/0/2024	2/13/2024	Seven Knights Idle Adventure	Lunar New Year attendance event				
			2/21/2024	Lineage 2 Revolution	Lunar New Year mission event				
		2/9/2024	2/12/2024	Blade & Soul: Revolution	Lunar New Year attendance event				
		2/15/2024	2/12/2024	Arthdal Chronicles	Title showcase (also available on YouTube)				
	Kakao Games	2/1/2024	2/1/2024	Eversoul	New character update				
	Nakao Garries	2/1/2024	2/1/2024						
		2/17/2024	2/18/2024	Idle Rumble Heroes	Global launch (developed by Neptune)				
		2/17/2024	2/18/2024	Eversoul R.O.M	Participating at Illustar Fes (offline cartoon/ animation festival)				
					Global launch (10 regions incl. Korea/ Taiwan/ Japan/ Thailand)				
	DIAI	Feb 2024	TBD	Eversoul	Monthly themed events, new costume/ character updates				
A 2.4	PearlAbyss	2/1/2024	2/1/2024	Black Desert	Improvement direction updated on in-game harassment				
Apr-24	NCSOFT	Apr 2024	Apr 2024	Throne & Liberty	Guild battle system update				
Jun-24	NCSOFT	Jun 2024	Jun 2024	Throne & Liberty	Duel arena system update				
2024	PearlAbyss	6/22/2024	6/22/2024	Black Desert	Offline user event (Heidel Ball 2024)				
2Q24	Kakao Games	2Q24	2Q24	ArcheAge War	Launch in nine regions (Taiwan/ Greater China/ SEA/ Japan)				
TBD	Kakao Games	TBD	TBD	Ares: Rise of Guardians	New area, story, and raid updates				
				Eversoul	New area and combat content update				
				Odin: Valhalla Rising	Guild war and castle siege warfare update				
2024	Krafton	2024	2024	PUBG	PUBG Global Series expanded to four (vs. two in 2023)				

Source: Company data, Press report

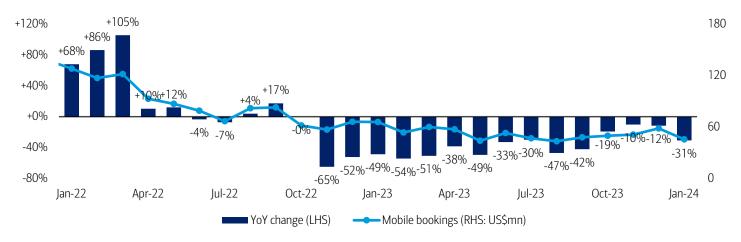


NC: Jan bookings down 14% vs. 4Q23 According to our tracking of 14+ mobile games published by NC:

3P estimates of monthly mobile bookings (US\$46mn) were down 31% YoY in Jan 2024 vs. down 14% YoY in 4Q23. Jan 2024 figures were down 14% vs. 4Q23 monthly average (US\$53mn). In Jan, all three mobile Lineage titles saw mobile bookings decline vs. 4Q23; Lineage M/ Lineage W/ Lineage 2M saw 10%/ 6%/ 31% decreases vs. 4Q23. Blade & Soul 2 rose 25% YoY and 9% vs. 4Q23.

Exhibit 5: NCSOFT - Mobile bookings trend

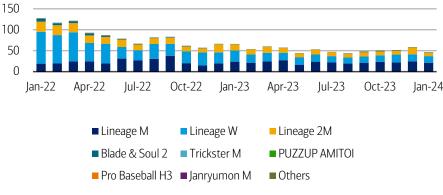
NCSOFT mobile bookings fell 31% YoY/22% MoM in Jan



Source: Sensor Tower BofA GLOBAL RESEARCH

Exhibit 6: NCSOFT - Monthly mobile bookings (US\$mn)

It was US\$46mn in Jan '24 (-14% vs. 4Q23 monthly average)



Source: Sensor Tower

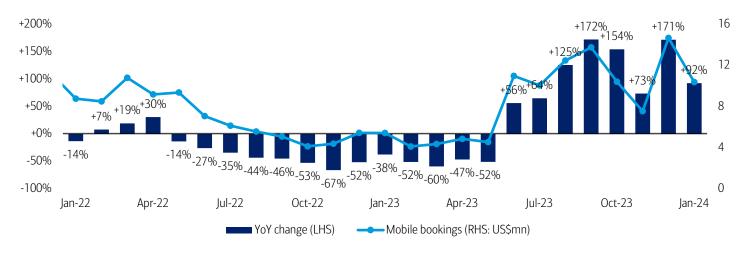
Krafton: Jan bookings down 5% vs. 4Q23

According to our tracking of 8+ mobile games published by Krafton:

3P estimates of monthly mobile bookings (US\$10mn) were up 92% YoY in Jan 2024 vs. up 135% YoY in 4Q23. Jan 2024 figures were down 5% vs. 4Q23 monthly average (US\$11mn). In Jan, self-published *PUBG Mobile/BGMI* (US\$10mn in Korea, Japan, and India) was up 119% YoY but down 4% vs. 4Q23. *New State Mobile/ Golf King* rebounded 12%/ 11%, respectively, vs. 4Q23 but *Defense Derby* was down 45%. *Peacekeeper Elite* and Tencent-published *PUBG Mobile* monthly average bookings (US\$81mn) were down 42% YoY/down 18% vs. 4Q23.

Exhibit 7: Krafton - Mobile bookings trend

Krafton mobile bookings rose 92% YoY but fell 29% MoM in Jan



Source: Sensor Tower

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Exhibit 8: Krafton - Monthly mobile bookings (US\$mn)

It was US\$10mn in Jan '24 (-5% vs. 4Q23 monthly average)



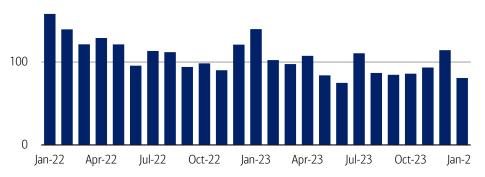
Source: Sensor Tower



Exhibit 9: PUBG Mobile* (Tencent) - Monthly mobile bookings (US\$mn)

It was US\$81mn (-42% YoY, -29% MoM) in Jan

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Source: Sensor Tower; Note: * including Peacekeeper Elite



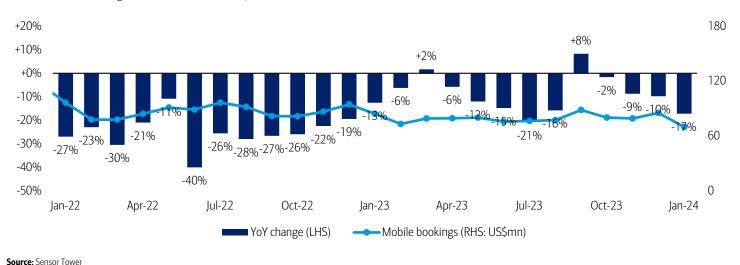
Netmarble: Jan bookings down 14% vs. 4023

According to our tracking of 48+ mobile games published by Netmarble:

3P estimates of monthly mobile bookings (US\$70mn) were down 17% YoY in Jan 2024 vs. down 7% YoY in 4Q23. Jan 2024 figures were down 14% vs. 4Q23 monthly average (US\$81mn). In Jan, Jackpot World/ Lotsa Slots/ Cash Frenzy, social casino titles, saw +1%/-1%/ +4% changes vs. 4Q23. The Seven Deadly Sins rose 18% vs. 4Q23 but MCOC/ Seven Knights: Idle Adventure saw 47%/ 47% declines.

Exhibit 10: Netmarble - Mobile bookings trend

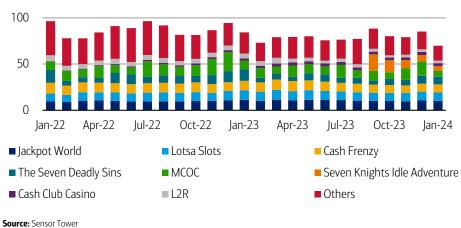
Netmarble mobile bookings fell 17% YoY/18% MoM in Jan



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Exhibit 11: Netmarble - Monthly mobile bookings (US\$mn)

It was US\$70mn in Jan '24 (-14% vs. 4Q23 monthly average)





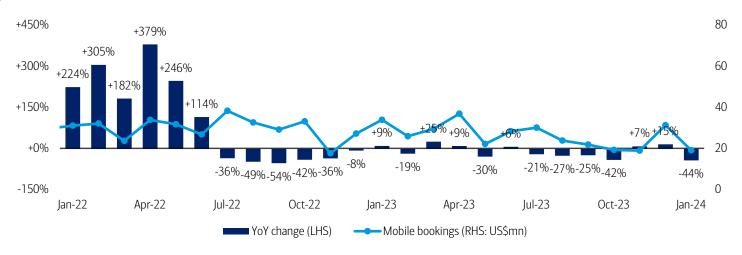
Kakao Games: Jan bookings down 20% vs. 4Q23

According to our tracking of 17+ mobile games published by Kakao Games:

3P estimates of monthly mobile bookings (US\$21mn) were down 38% YoY in Jan 2024 vs. up 1% YoY in 4Q23. Jan 2024 figures were down 20% vs. 4Q23 monthly average (US\$26mn). In Jan, *Odin* fell 14% vs. 4Q23 due to high base (large-scale update on 20 Dec). *ArcheAge War/ Ares/ Uma Musume* also declined 35%/ 34%/ 46% vs. 4Q23. *Eversoul* (launched on 5 Jan 2023) fell 89% YoY but rose 82% vs. 4Q23 backed by 1st-anniversary event update. *Eversoul* is taking part in an offline subculture event, Illustar Fes, on 17-18 Feb

Exhibit 12: Kakao Games - Mobile bookings trend

Kakao Games mobile bookings fell 44% YoY/39% MoM in Jan

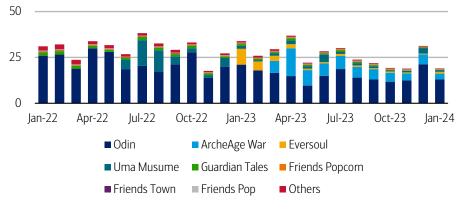


Source: Sensor Tower

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Exhibit 13: Kakao Games - Monthly mobile bookings (US\$mn)

It was US\$19mn in Jan '24 (-18% vs. 4Q23 monthly average)



Source: Sensor Tower

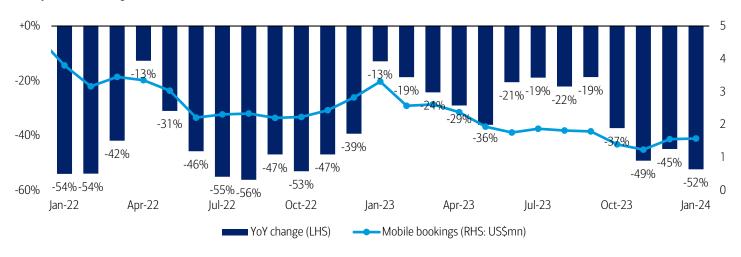


PearlAbyss: Jan bookings up 13% vs. 4Q23 Based on our tracking of *Black Desert Mobile*, a mobile game published by Pearl Abyss:

3P estimates of monthly mobile bookings (US\$1.6mn) were down 52% YoY in Jan 2024 vs. down 44% YoY in 4Q23. Jan 2024 figures were up 13% vs. 4Q23 monthly average (US\$1.4mn), following a new PvP content update added to Black Desert Mobile on 16

Exhibit 14: PearlAbyss - Mobile bookings trend

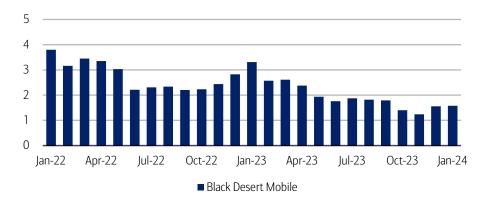
Pearl Abyss mobile bookings fell 52% YoY but rose 1% MoM in Jan



Source: Sensor Tower BofA GLOBAL RESEARCH

Exhibit 15: PearlAbyss - Monthly mobile bookings (US\$mn)

It was US\$2mn in Jan '24 (+13% vs. 4Q23 monthly average)



Source: Sensor Tower



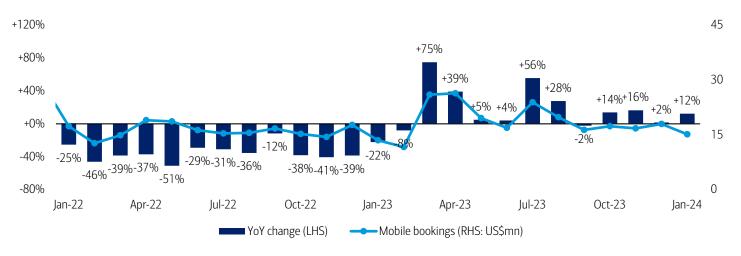
Com2uS: Jan bookings down 13% vs. 4023

According to our tracking of 22+ mobile games developed by Com2uS:

3P estimates of monthly mobile bookings (US\$15mn) were up 12% YoY in Jan 2024 vs. up 10% YoY in 4Q23. Jan 2024 figures were down 13% vs. 4Q23 monthly average (US\$17mn). In Jan, Sky Arena fell 12% vs. 4Q23. MLB 9 Innings / MLB 9 Innings Rivals, Com2uS' baseball titles, also declined 10% / 10%, respectively, vs. 4Q23.

Exhibit 16: Com2uS - Mobile bookings trend

Com2uS mobile bookings rose 12% YoY but fell 16% MoM in Jan

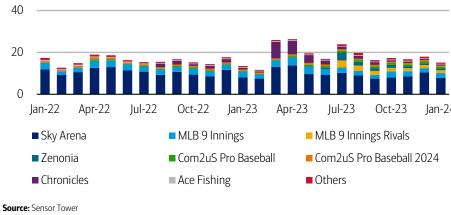


Source: Sensor Tower

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Exhibit 17: Com2uS - Monthly mobile bookings (US\$mn)

It was US\$15mn in Jan '24 (-13% vs. 4Q23 monthly average)





Disclosures

Important Disclosures

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Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R1}

Buy	≥ 10%	≤ /0%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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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