

EXHIBIT 45

[Connections Pillar] Instagram H1 2022

— 2-Page Planning

UPDATED ON 11/15

The 2-Year Plan

Purpose Statement

Bring teens closer to the people and experiences they love on Instagram.

How will you know if you've succeeded?

Success in 2 years:

We will regain momentum with teens in the US, deliver new experiences for teens globally, and strengthen our foundation for future growth.

Rationale:

IG is the best app in the Facebook family for young people, primarily teens. However, US teen usage is declining despite overall US growth trends and we still have over 100M teens outside the US who are not on Instagram. Fewer US teens (especially 13-14 yos) are joining Instagram and there is stiff competition with TikTok, YouTube, Snapchat, and others vying for market share in the “be entertained” and “close friends” JTBD category both in the US & globally. As Facebook saw, losing product market fit with teens only takes a few years, which is why it's important for Instagram to take action now to turn these trends around.

Measurement:

North Star:

The best success metric that reflects the Connections team's aspiration in the next 2 years is Global Teen MAU. In the near term, our plan is to focus on re-accelerating Teens Growth in the US, and ship experiences globally as needed. In parallel, we will invest in the foundational work that will allow us to unlock and scale teen growth globally.

Over two years, we will be successful if:

1. We reversed the declining trend in US teens, back to pre-H2 2020 levels: +2.5M Actual US Teen MAU
2. We win against competitors in Global Teen penetration: 75+% Global Teen Market Penetration

	A	B	C
1	Success Metric(s)	Current Value (Extrapolated from various methods)	Value in 2 years
2	Global Teen MAU	450-585M*	720-875M**

*450-585M Global Teen MAU is our best guess at how many actual teen accounts we have on Instagram today. The range is large because there are many assumptions that go into our teen estimates. This number was triangulated using our CAPs survey (~410M Global Teen MAU, with a known 10-30% underestimation) & Stated Age (~180M Global Teen MAU, with only 77% coverage with our users and a known ~60% lying rate for teens).

720-875M Global Teen MAU is calculated by first building a few forecasts of how actual teen accounts on Instagram will grow organically in 2 years. This is hard to predict and creates a large range because it's hard to say how we expect teen growth trends to look moving forward, especially if we face headwinds with policy changes, challenges in emerging markets, etc. We did our best projecting something realistic through 2 methods: 1) forecasting Global Teen MAU as measured through CAPs surveys [Chart 1] and 2) forecasting Stated Age teen growth as a % of Global MAU [Chart 2], applying this to our Global MAU forecast in 2 years, and adjusting for coverage & lying. Finally, on top of this organic forecast, we applied an assumption that our teams will **drive ~50M incremental Global Teen MAU impact over 2 years. With US Teen MAU making up ~5% of Global Teen MAU, we expect this kind of incremental goal is needed to reverse the US trend since we need +2.5M to exceed H2 2020 levels, when the decline began [Chart 3].

Finally, we wanted to gut check that this goal was aggressive enough, so we de-duped Global Teen MAU → MAP and estimated market penetration. Although this is just a ballpark given a lot of unknowns, we believe we can get global teen market penetration to 75-90% with our 2 year goal.

Chart 1: Global MAU forecast using mean CAPs Survey Global Teen MAU (which is known to under-predict by ~20%)

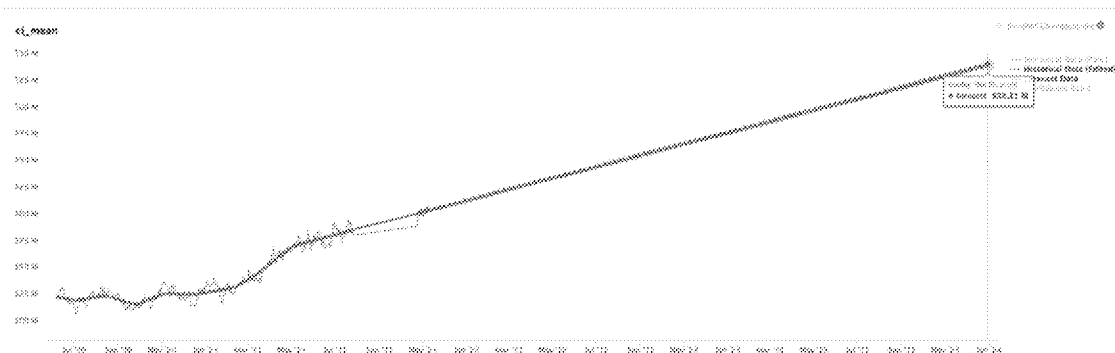


Chart 2: Teens as % of Global MAU via Stated Age (Baseline Forecast)

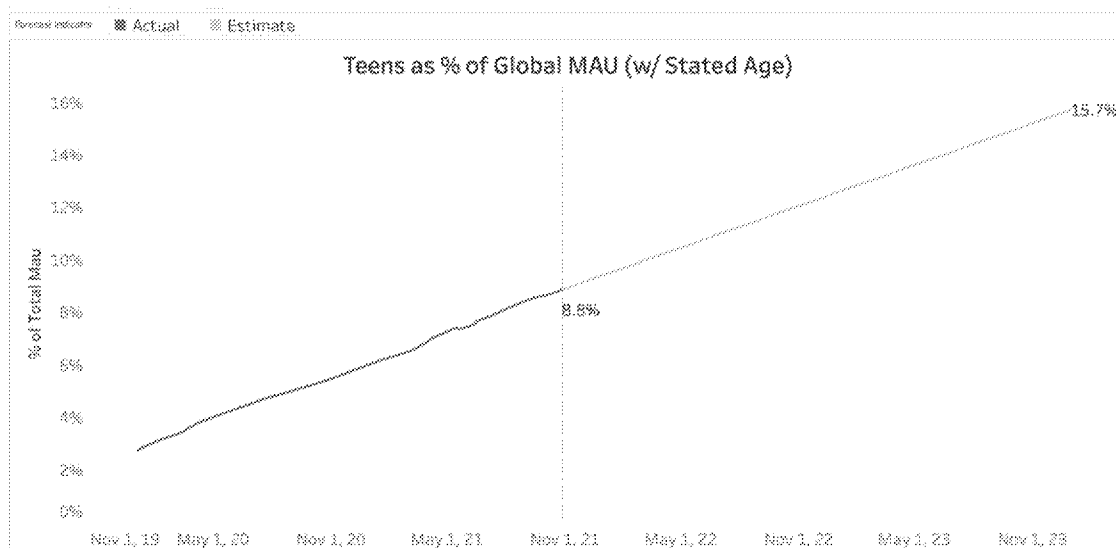
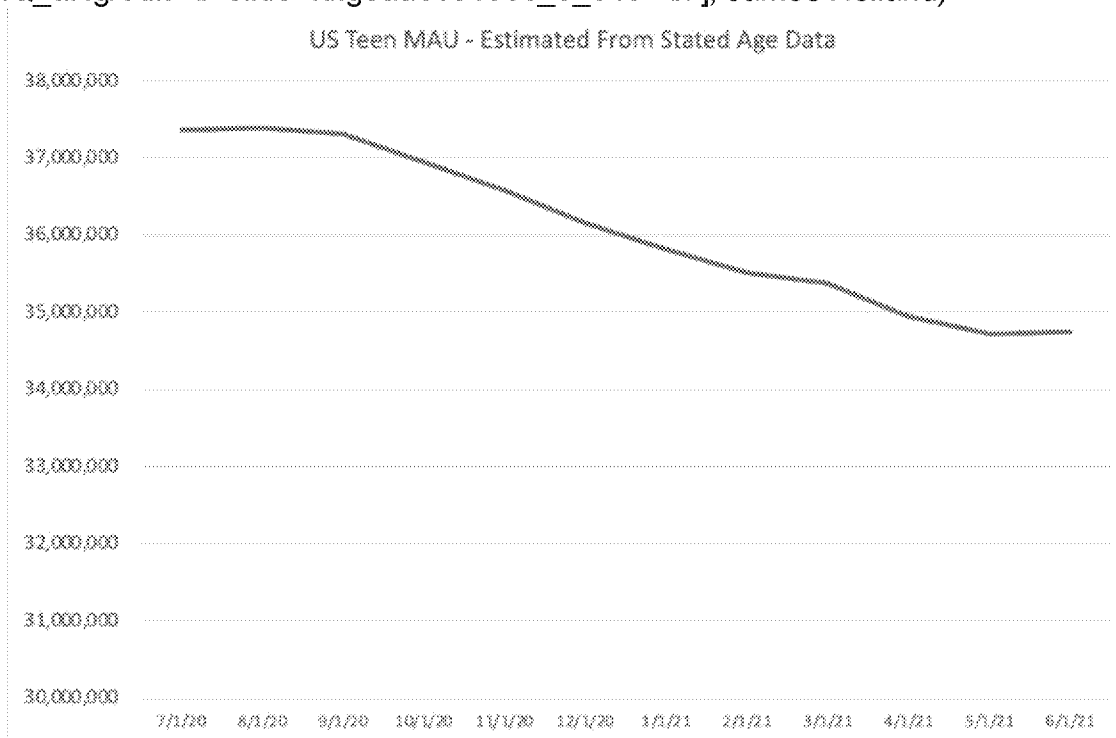


Chart 3 : Extrapolation of actual US teens (Source: [[HYPERLINK](https://docs.google.com/presentation/d/1eUcuutR20tkewwgTuCSh2_nU6f211T5LMKBVcMQ_aHg/edit) "https://docs.google.com/presentation/d/1eUcuutR20tkewwgTuCSh2_nU6f211T5LMKBVcMQ_aHg/edit" \l "slide=id.geaa6c8138c_0_319" \h], James Holland)



H1 Focus by Team:

While Global Teen MAU best reflects our team's 2 year vision, it's worth noting that our H1 success metrics at the team level will be highly varied to reflect immediate priorities

to be US-first and the diverse stage and levers of each team within the pillar. The chart below highlights our near term priorities.

	A	B	C
1	Team	H1 2022 Success Metric by Team	Why?
2	Growth	US Teen MAU	Our near term focus will be on US teen growth
3	Graph	US Teen DAU	Graph is our best lever to drive DAU
4	IG Lite	Global MAU (TBD -- still be refined by team)	IG Lite is our solution for emerging markets and will focus first generally on finding PMF
5	YE	Launch Milestones	Given this team is building 0->1 products, their goals will be more milestone focused to start

2021H2 Status

H2 Planning 1-Pager: [[HYPERLINK "https://fb.quip.com/ELvJA027lXkP"](https://fb.quip.com/ELvJA027lXkP) \h]

	Goal	Goal Metric	Current	H2 Target	Status
1	[P0] Team Health: Rebuild teams and stabilize morale	Milestone	Hired 4 DS, 2 PM, 1 PGA	Hire 3 DS, 3 PM, 1 PGA	On Track
2	[P0] Identify opportunities to accelerate US teens growth	Milestone	1 out of 7 Completed	Hit 7 out of 7 priorities	At Risk
3	[P1] Unlock the value of IG for new, needy and churned users in the US	US MAU	630k US MAU shipped	1.05M US MAU	On Track
4	[P1] Deepen US engagement through sustainable growth levers	Milestone	0 out of 3 Completed	Hit 2 out of 3 priorities	On Track
5	[P1] Enable launching of Company Account Access in 2022	Milestone	1 out of 6 Completed	Hit 6 out of 6 priorities	At Risk
6	[Stretch] Assess investing in targeted cohort growth opportunities: Teens & Creators	Milestone	0 out of 6 Completed	Hit 0 out of 6 priorities	On Track

7	[P0/P1] Strategic Priorities	Milestone	1 out of 6 completed	Hit 5 out of 6 priorities	On Track
8	[P1] Grow IG Lite & Increase Engagement	Milestone	0 out of 2 Completed	Hit 2 out of 2 priorities	At Risk

H1 Plans

In H1 2022, Connections will take a US teens-first approach to the products we build. Based on the findings from the US teen decline, we know we'll have to focus on attracting new teens and improving their onboarding experience. Our plans will focus on ways to lean into the Entertainment JTBD earlier for teens and test new ways to enable better friending for the Close Friends JTBD. Additionally, we will invest in new 0→1 bets and novel experiences to provide more value for teens. Beyond the US, IG Lite will help us lay the foundation for teen growth in emerging markets.

H1 2022 Goals & Metrics

	A	B	C	
1	Goal	Goal Metric	End of H1: 50-50 Target (if ready)	
2	Accelerate teens growth to improve top of funnel and retention	Incremental US Teen MAU	<i>Rough estimate, to be finalized in June (if ready)</i>	
3	Build new 0→1 experiences and find PMF with teens to improve retention	- Launch new experiences that will solve teen needs		
4	Support Company Priorities w/ CAA	- Enable launching V1 of Company Account Access		
5	Tailor IG Lite for emerging markets growth	Global (low RAM) MAU		

Pillar-level Plans

Overall strategy.

1. Doubling down on Teens with Growth and Graph
2. Investing in new bets to find PMF for Teens with Youth Experiences
3. Long term growth investment with IG Lite/emerging markets to find PMF and accelerate growth

Please keep this document short and high-level. The goal is to provide a summary of what the PG will focus on with additional detail for each pillar. We do not need detailed project plans and expect the majority (or all) of the team planning process will start after this document is created.

Connections

Discussion Questions

What would be helpful to align on with IG Leads? Please limit to 5 topics phrased as questions.

1. **Are we aligned on Connections overall approach and strategy for Teens?**
We'll be taking a two pronged approach to tackle this: a) growing the top of the funnel and improving early retention with existing products leveraging our Growth and Graph sub-pillars while b) investing in zero to 1 bets to find PMF by building new experiences starting with Youth Experiences and long term with IG Lite globally.
2. For 2022 we plan to keep both growth funnel and graph as investment areas, while refocusing the offense part of their work to teens. As our Youth Experiences and IG Lite bets evolve, we will revisit the relative allocation. **Are leads aligned with this portfolio allocation?**
3. **Are we aligned on Graph's multiple objective focus: Primary - Early Friending (70%) and Secondary - Sessions or Close Friending (30%)?**
 - a. We're still working through objective metric for Close Friending and if Graph is well positioned to drive it or
 - b. If Graph should just focus on Sessions as the overall metric instead of optimizing for Close Friends
4. **Are we aligned on Growth subpillar's overall priorities: Teens acquisition and retention (P0), CAA (P0) and US overall (P1)**
 - a. Growth Activation team will continue to focus/prioritize CAA over Teens specific activation work-streams (handoff timing still TBD)? This is 33% of the overall Growth team and includes some of our best people across functions.
 - b. Is reclaiming expected Global MAU loss (100M+) from Apple new requirement to enable in-app D&D a priority? If so, where does it stack rank compared to above priorities?
5. Any guidance from leads on how we should think about **Youth Experiences charter/swim lanes versus other IG teams** that are responsible for those verticals (eg: Home: Profile/Identity)?

The 2-Year Plan

Purpose Statement

Bring teens closer to the people and experiences they love on Instagram.

How will you know if you've succeeded?

Write a paragraph explaining what success will look like in a 2 year time-frame, as well as why succeeding is important for Instagram, and how you plan to measure that success ([HYPERLINK "https://fb.workplace.com/notes/1034119110678263" \h])

Success in 2 years:

We will regain momentum with teens in the US, deliver new experiences for teens globally, and strengthen our foundation for future growth.

Rationale:

IG is the best app in the Meta family for young people, primarily teens. However, US teen usage is declining despite overall US growth trends and we still have over 100M teens outside the US who are not on Instagram. Fewer US teens (especially 13-14 yos) are joining Instagram and there is stiff competition with TikTok, YouTube, Snapchat, and others vying for market share in the “be entertained” and “close friends” JTBD categories, both in the US & globally. As Facebook app saw, losing product market fit with teens only takes a few years, which is why it's important for Instagram to take action now to turn these trends around.

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	A	B	C
1	Success Metric(s)	Current Value (Based on Stated Age)	Value in 2 years
2	Global Teen MAU	180M* (234M adjusting for coverage)	474M** (492M adjusting for coverage)

*180M Global Teen MAU is a measurement of how many Stated Age Teen MAU we've captured today. *This drastically underestimates the number of actual teen accounts we have on Instagram.* Stated Age underestimates that teens make up 8.8% of our total Global MAU. We know we have limitations with teen data: Stated Age rolled out in 2020 and has 77% coverage, and we know teens often lie about their age. If we adjust today's measured Stated Age Teen MAU to account for 77% coverage, this gets us to 234M Teen MAU.

**474M Global Teen MAU is calculated using:

1. **Forecasted Global Growth:** Our most recent 5-year Global MAU forecast, which has our overall outlook for the end of 2023 assuming current growth trajectory (3B Global MAU)

2. **Organic Stated Age Coverage & Stated Age Teen Growth:** Growth in Stated Age coverage to 96%, with organic growth in Stated Age teens accounting for 15.7% of our Global MAU (454M Stated Age Teen MAU) [Charts 1 & 2]
3. **Outsized Impact on Teen Growth from Team Efforts:** 20M Incremental Stated Age Teen MAU impact over 2 years, as measured with holdouts, with actual teen impact estimated to be ~65M when accounting for the fact teens lie (we believe stated age only captures ~30% of actual teens). With US Teen MAU making up ~5% of Global Teen MAU, this means ~3.25M incremental actual US teens.

We previously extrapolated actual US Teen MAU from Stated Age, which suggests we need to make up ~2M actual US Teen MAU to reverse the trend [Chart 3]. Our two year goal has us exceeding this, growing teens above where we were in 2020 before the decline.

Chart 1: Global MAU with Stated Age Coverage (Baseline Forecast)

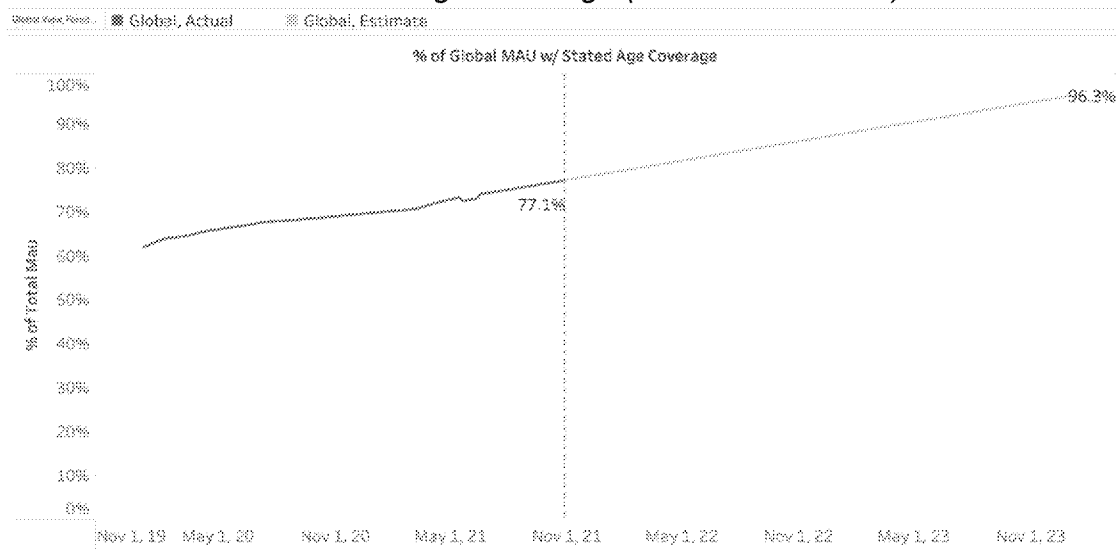


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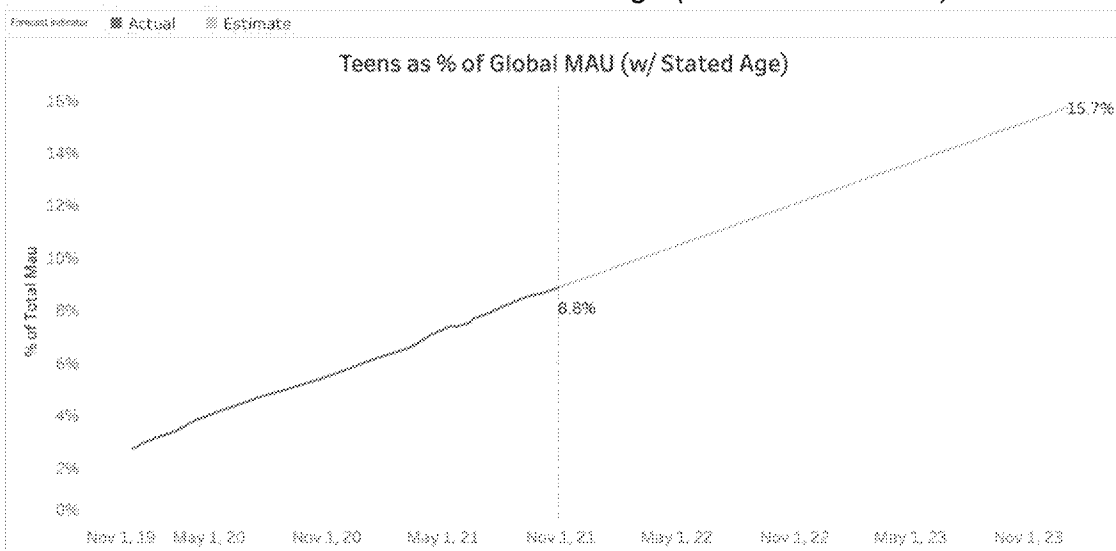


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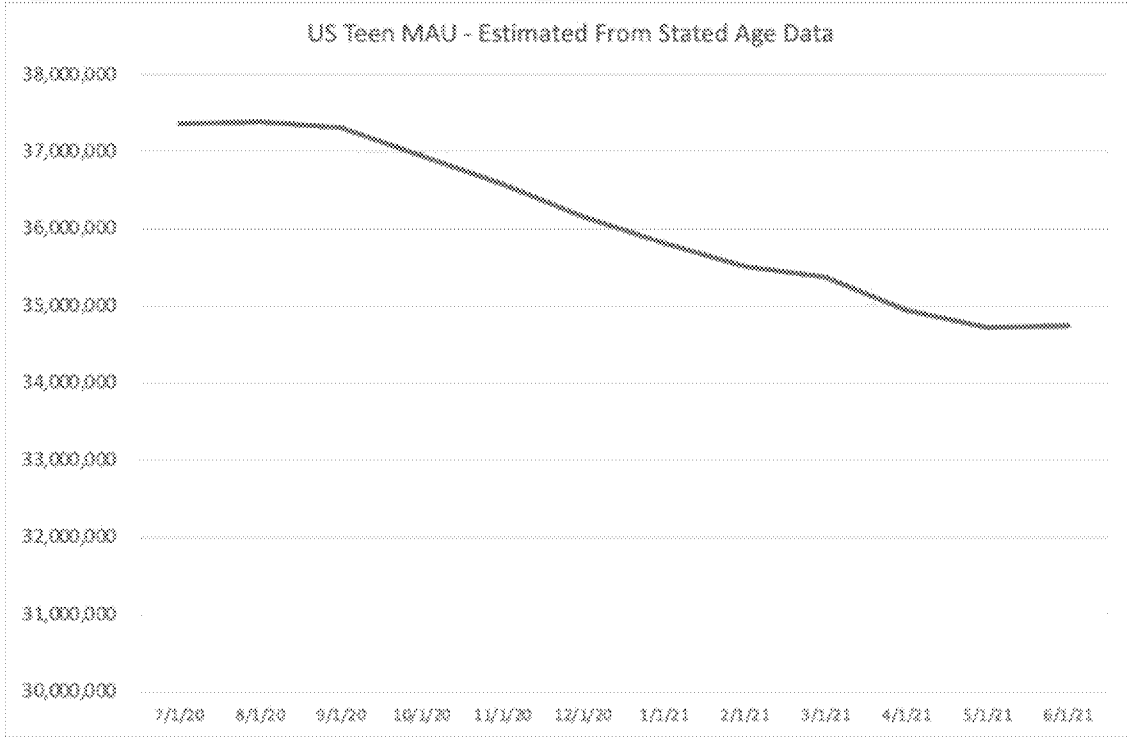
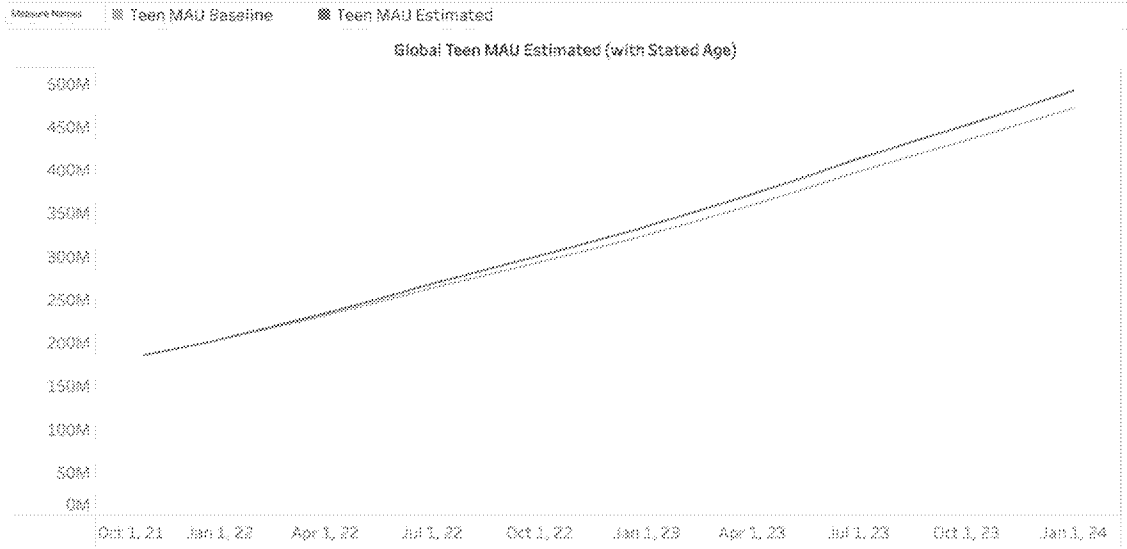


Chart 4: Accelerating Global Teen Growth (estimated with stated age teens)



H1 Focus by Team:

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H1 Plans

Write 1 paragraph summarizing your PG's strategy in H1 2022. What problems are you focusing on and why are you choosing the products investments you're making? Please consider how the goals you set this half ladder into the 2-year success plan above.

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H1 2022 Goals & Metrics

	A	B	C	
1	Goal	Goal Metric	End of H1: 50-50 Target (if ready)	Notes
2	Accelerate teens growth by building targeted experiences to attract and retain them	Incremental US Teen MAU	<i>Rough estimate, to be finalized in June (if ready)</i>	Encompass Graph effort teens
3	Support Close Friending Workstream by driving meaningful interactions	TBD: Sessions/BFF metric		
4	Tailor IG Lite for emerging market growth	TBD: Global low-RAM MAU		

5	Build new experiences that will lead to PMF for teens	Milestone Goal		
6	Enable launching of Company Account Access in 2022	Milestone Goal		
7	Recapture Global MAU hit from enabling in-app deletions and deactivations	Global MAU		

Pillar-level Plans

Overall strategy.

1. Doubling down on Teens with Growth and Graph
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Pillar People Allocation

Team	Allocated Eng HC	Filled Eng HC	% filled	Allocated XFN HC	Filled XFN HC	% filled	Total Allocated	Total Filled	% filled
Growth	32	28	88%	27	25	93%	59	53	90%
Graph	31	23	75%	18	16	89%	49	39	80%
Youth Experiences	10	7	70%	9	7	78%	19	14	74%
IG Lite	9	9	100%	7	6	86%	16	15	94%
xGrowth	0	0	#DIV/0!	2	1	50%	2	1	50%
Leadership	2	1	50%	5	5	100%	7	6	86%
Pillar Total	84	68	81%	68	60	89%	152	128	85%

Sub-pillar themes for H1 2022

Below are key themes for each sub-pillar, teams are working on fleshing out specific bets to finalize roadmap.

Growth

- **Logged out experience:** Enable discovery & exploration for non-users visiting IG, focused on Entertainment/Interests.
- **External Sharing:** Meet users where they are and create the flywheel to acquire users seamlessly on third party apps.
- **Onboarding/NUX 2.0:** A teen-first onboarding experience that leverages unconnected content (in addition to friending) to show IG value quicker and optimizes for private by default accounts
- **CAA:** Deliver milestone V1 to ship on iOS and Android.

Graph

- **Early friending:** Make a meaningful dent in new user retention, making up for 50% of the inbound follow loss from private by default via teen HVF.
- **Close friending/Sessions:** Update ranking, modeling and create a budget strategy to drive Friend Interaction Session (FIS). Early target 20% of total FIS growth.
- **Foundations:** Create a solid foundation for client side ranking privacy work (addressing private by default) and improve throughput of candidate processing by 2x.
- **Interest/Creators:** Leverage interest/creators follows and product experiences to drive teen retention.

Youth Experiences

Build zero to 1 product experiences to find PMF with Teens. This sub-pillar is in an earlier stage where we have identified themes based on IGY teams work and research but are currently brainstorming specific bets.

- **Identity and Expression:** Teens are in the process of forming their online and offline identities. How might we help Teens express themselves?
- **Connection & Close Friends:** Feeling connected to close friends, family, or even social causes is important to teens. How might we help teens connect with and feel close to friends and family?
- **Entertainment & Play:** Teens want to be entertained and to feel free to have fun. How might we create more spaces for entertainment and play?
- **Exploration & Interests:** Teens interests change quickly. How might we help teens discover, curate, and go deep on their interests?

IG Lite

Demonstrate PMF and sustained growth with low RAM users in emerging markets

- **Improve access:** Preloads and FOS programs to increase growth rates, as well as paid ads and (ideally) on-platform QPs
- **Double down on performance:** Improve performance for video content

- **Tailor for emerging markets needs:** Tailor IG Lite for emerging markets users, including leaning into the “interest” and “saves data” levers

Additional Considerations

Every half, we try to elevate specific considerations that we'd like each pillar to consider as they are making their half plans. This half we are elevating three things: platform dependencies, PRE, and resourcing flags. Please fill out each section below.

Capacity

We have a lot of experience considering resource constraints as it comes to people/headcount and now need to consider our compute and storage budgets in the same way. Please flag cases where you might feel resource constrained next half. Capacity / Efficiency Planning Guidance here: [[HYPERLINK "https://fb.quip.com/0wtkANEhcb0A" \h](https://fb.quip.com/0wtkANEhcb0A)]

We have a DAU impact gap between AYM and PYMK, Instagram and Facebook app user recommendations. PYMK has 10x the AYM servers. Our efficiency gains can't give us the same multiplier to turn around US and teen growth. With 80% of new teens being private, and the new teen user experience in a diminished state, capacity is needed to hit ambitious goals on graph density. Teen specific capacity request is TBD.

Platform Dependencies

Increasingly, our product pillars are reliant on teams across Instagram and the rest of the company. Please list cases where your pillar is reliant on another team, or whether you are acting as a platform for other teams. Please ensure these dependencies are also accounted for in the other team's doc.

Key Platforms: IGML, Unicorn, IGNS, Lite Interfaces, PAI, CPP (UIG, BFF, Age, People)

Performance, Reliability, and Quality

Please describe how your pillar is prioritizing work on performance, reliability, and product quality (all components of Craft). This can be a mix of improving existing systems or investments you are making to improve future products. PRE Planning guide here: [[HYPERLINK "https://fb.quip.com/mfnqAfm8a10f" \h](https://fb.quip.com/mfnqAfm8a10f)]

Improve the efficiency and quality of user recommendations. This half we've taken a goal to reduce CPU processing per candidate by 5%, hitting 6.5%. Efficiency and processing throughput work will continue in 2022.

Improve photos-video publishing reliability (86%-87%, 81%-82% goals this half) will continue to be a focus for igLite. Lite interfaces partners improved cold start by 131 ms and message sends by 5%. Overall focus is prioritizing closing gaps with ig4a.

Better Engineering

Better Engineering is a company wide engineering program focused improving developer productivity and craft. Each half we promote instgram wide IGBE goals and encourage teams to make investments local to them that help make sure they can move fast reliably and sustainably. For BE planning guidance see [HYPERLINK "https://fburl.com/wiki/curkzsrn" \h]

Better Engineering is an integral part of Connections planning process. We allocate 20% of engineering and data engineering capacity to bottom-up and top-down engineering efforts. This half our work encompassed: Modern Logging (USL), Testability (Code Coverage), Improve documentation (wiki consolidation), Modern Code&Better Tools (Kotlin adoption). We track planning and progress [HYPERLINK "https://fb.workplace.com/groups/2511055465793138" \h].