AMENDED Exhibit 538

PLAINTIFFS' OMNIBUS OPPOSITION TO DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT

TikTok-Wang
22
5/21/25 - J. Dunn, RMR, CRR
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TikTok

Break through US Growth

TikTok US Offsite, July 2022

Agenda

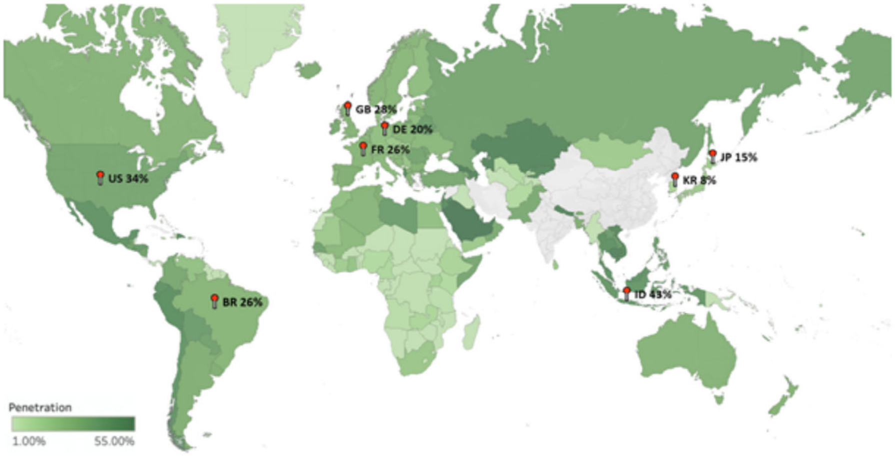
1. Global growth overview
2. US growth drivers & constraints
3. Discussion: how to break through US growth?

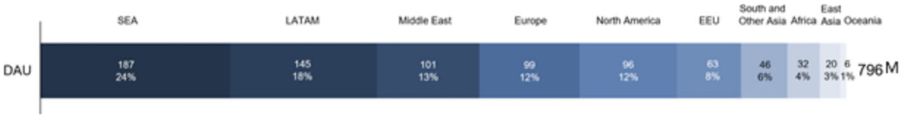
Agenda

1. **Global growth overview**
2. US growth drivers & constraints
3. Discussion: how to break through US growth?

TikTok global penetration overview

TikTok DAU Penetration by country (June 2022)





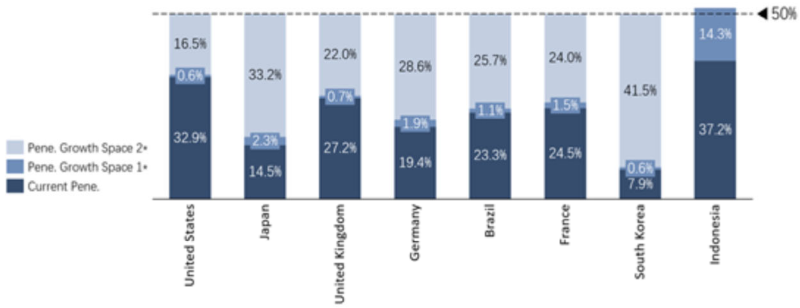
Key Metrics in Priority Markets (June 2022)

Priority	Country	DAU (M)	Duration (min)	Publish Rate
-	*Global*	*796*	*83*	*6.7%*
A+	United States	85	90	7.1%
	Japan	13	73	2.3%
	United Kingdom	15	88	7.2%
A	Germany	13	89	5.6%
	Brazil	44	73	5.4%
	France	13	88	6.6%
	South Korea	3	77	5.5%
	Indonesia	73	105	9.2%

Source: TikTok internal, GSMA

TikTok still has significant growth potential in key priority markets through retention improvements

DAU Growth Ceiling by Country (June 2022)



	United States	Japan	United Kingdom	Germany	Brazil	France	South Korea	Indonesia	Global
Current DAU / M	85	12	15	13	41	13	3	66	800
DAU Ceiling / M ***(50% smartphone pene.)***	130	43	28	33	88	26	21	89	-
DAU_Retention_D30	78%	79%	80%	80%	72%	79%	75%	77%	76%
DNU_Retention_D30 (Android)	28%	21%	29%	33%	31%	31%	21%	44%	38%

Note: TikTok Main Only Global ↑

Pene. Growth Space 1 : Growth potential assuming DNU and retention(LT) maintained at current level*

Pene. Growth Space 2 : Growth potential assuming DAU penetration at 50% of smartphone users (MAU full penetration)*

Key Growth Opportunities by Country

Market	Key Growth Opportunities
United States Europe Japan	New user's retention
Brazil South Korea	New user's retention & Existing user's retention

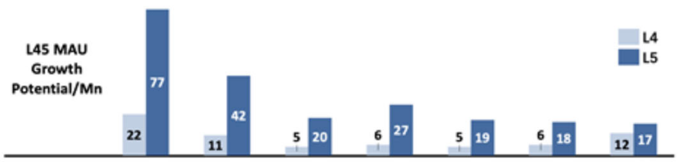
- The key growth opportunities vary by country. Most priority markets (except Brazil and South Korea) perform well in existing user's retention while still having room for improvement in new user's retention.
- US has a more significant growth potential in new user's retention.

Source: TikTok internal, Prophet, GSMA

TikTok has its greatest growth potential in older user demographics

TikTok MAU Penetration by Country (June 2022)

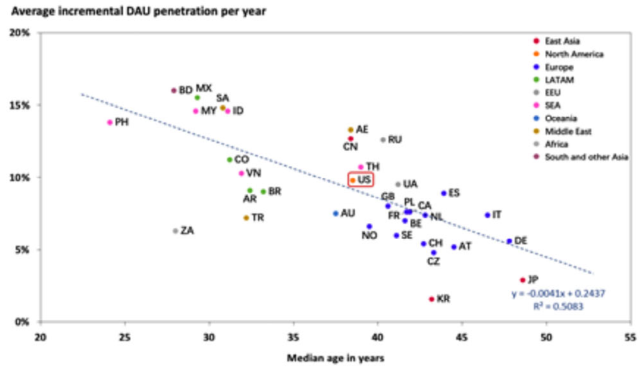
	A+			A			
	US	JP	GB	DE	FR	KR	ID
L2 (16-17)	70%	56%	75%	73%	77%	41%	74%
L3 (18-24)	68%	33%	65%	55%	63%	21%	72%
L4 (25-34)	53%	17%	45%	38%	40%	20%	66%
L5 (35+)	36%	12%	22%	20%	20%	20%	59%



Source: GWI Q2 2022

- L45 (age 25+) user group has the lowest penetration rate and largest growth potential in most priority markets
- US currently has the largest growth potential in L5 user group (age 35+)

Correlation of "TikTok DAU Penetration Growth" and "Median Age"



Source: WorldData.info, TikTok internal
Time range: 2019-2022

- DAU penetration speed in each country is highly correlated with the median age of the countries: the higher the median age, the lower the penetration speed
- US median age is 38.5 years old, and its average DAU penetration speed is 9.8% per year, slower than Douyin (China, median age of 38.4 years old) by 2.9 p.p. per year

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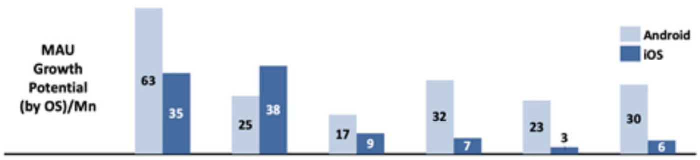
According to TikTok internal data and the data of smartphone users by age from [redacted] TikTok penetration rate by age is: L1+2: 91%; L3: 81%; L4: 84%; L5: 23%. MAU of 20220630 was collected.

TikTok also has great growth potential among Android users

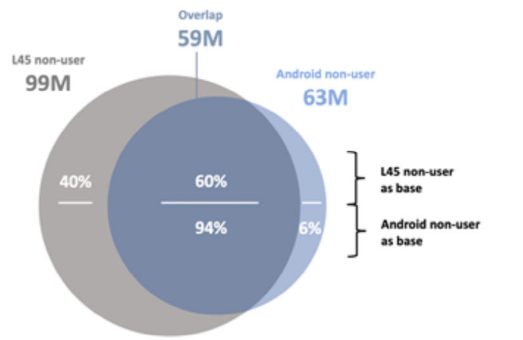
TikTok MAU Penetration by country (June 2022)

	A+			A		
	US	JP	GB	DE	FR	KR
Android	46%	20%	40%	31%	37%	13%
iOS	75%	31%	66%	60%	77%	30%



Source: GSMA, GWI, TikTok internal
Time range: 2022 Q2
Note: Countries with <20% iOS market share are excluded

US MAU Growth Potential Overlap between L45 & Android



Source: GSMA, GWI, TikTok internal
Time range: 2022 Q2

- Android has a significant penetration gap with iOS in most priority markets
- US Android MAU penetration (excluding users under 15) is ~30p.p. lower than iOS

- In the US, over 90% of Android non-users are above 25 years old (L45), indicating that Android low penetration can, to a large extent, be explained by L45 low penetration
- In addition to the older age structure of Android users, other issues such as performance and sharing behavior also lead to the Android penetration gap with iOS

Android penetration gap: performance, age structure, others (eg. sharing behavior)
大盘占比Android vs iOS in US: 45% vs 55%
大盘年龄分布数据Age distribution (from GWI):
Android: L2: 1%; L3: 8%; L4: 22%; L5: 69%
iOS: L2: 3%; L3: 22%; L4: 25%; L5: 51%

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US penetration overview

US TikTok MAU Penetration by State

Source: World Population Review, TikTok internal
Time range: 2022 Q2

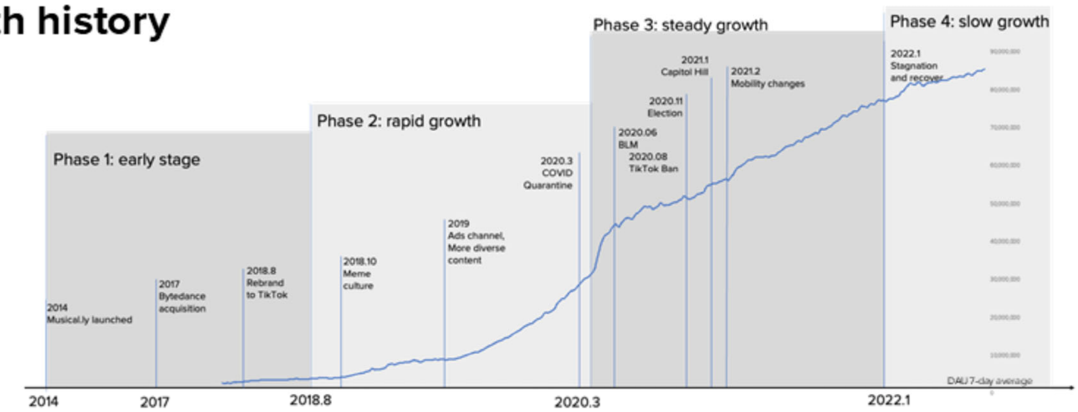
TikTok MAU Penetration Overview by Category

Category		TikTok MAU Penetration
Age	L23	68%
	L45	41%
OS	Android	46%
	iOS	75%
Gender	Male	43%
	Female	49%
Urban Context	Urban	50%
	Suburban	43%
	Rural	43%
Income	Low	45%
	Medium	45%
	High	46%

Source: GWI 2022 Q2, TikTok internal

OS: here it used internal data for TT
GWI: Android-41%, iOS-54%

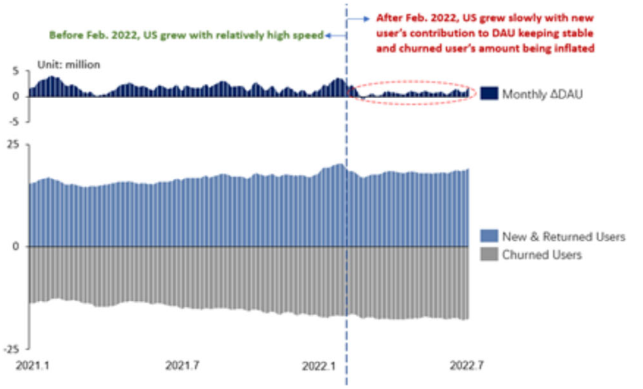
US growth history



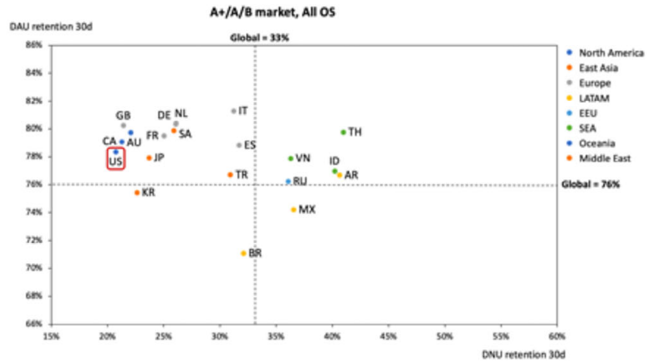
Content	Lipsyc; Challenges	TikTok cringe, Lipsyc dance, cosplay, etc	PewDiePie; Meme Rise Gamer	Meme, gamer, sports, Country (old town road)	Comedy, animal, family, political, dancing	Entertainment, Singing & dancing, Food & Drink,	OGC, PGC
User Group	L12 Female (Middle or high school females)		L2 male (high school male)	Start of user diversity, L2 male Gamer, rural	L345	L45	L45
Growth Drivers	Low barrier in creation	Ads; Algo	Ads; Top YouTube creators	Ads channel to Snap, music, sticker text.	Quarantine, political events, Media coverage	Android user acquisition	Preinstall, Android user acquisition

US is facing growth stagnation this year due to low user retention

Monthly ΔDAU Breakdown by "New & Returned Users and Churned Users"



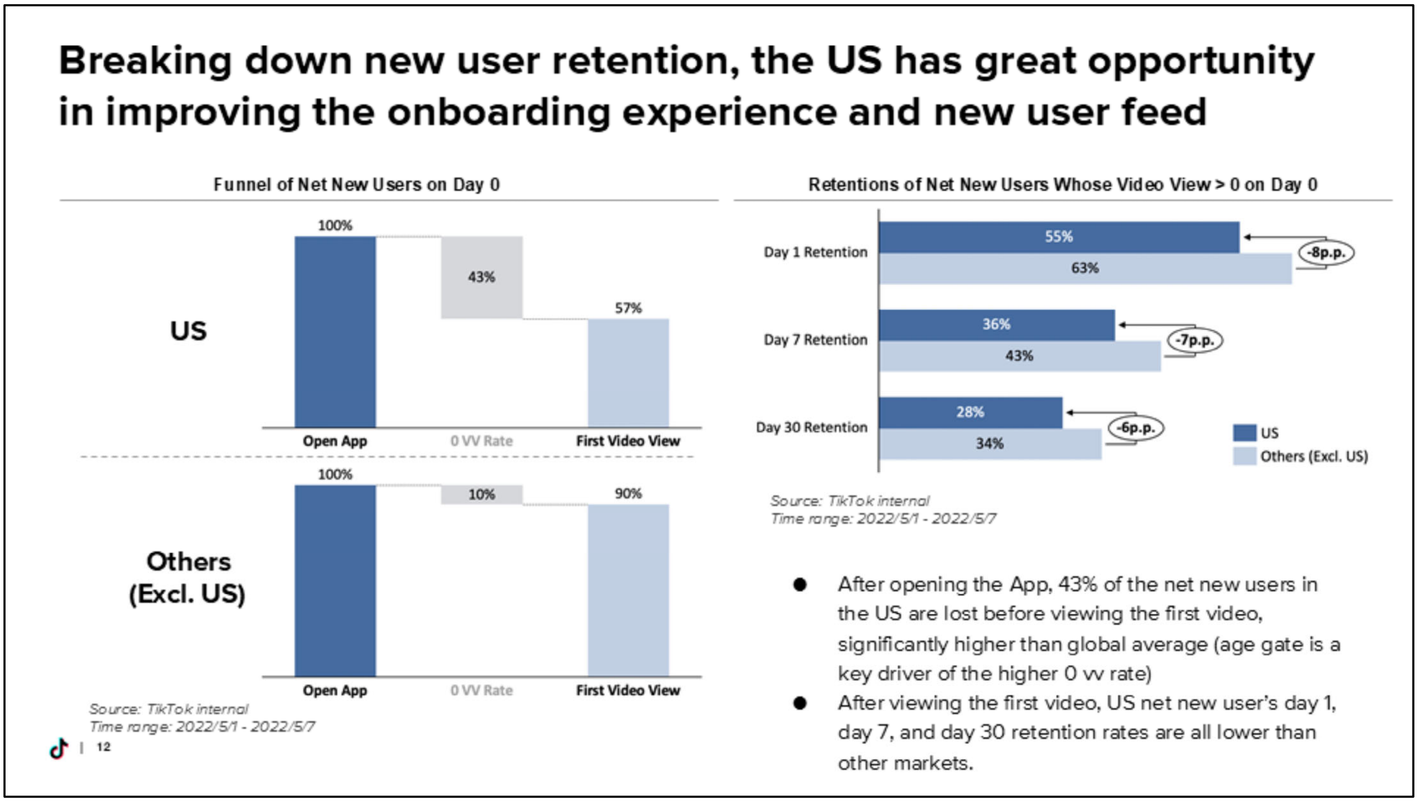
DAU and DNU Retention_D30, by country



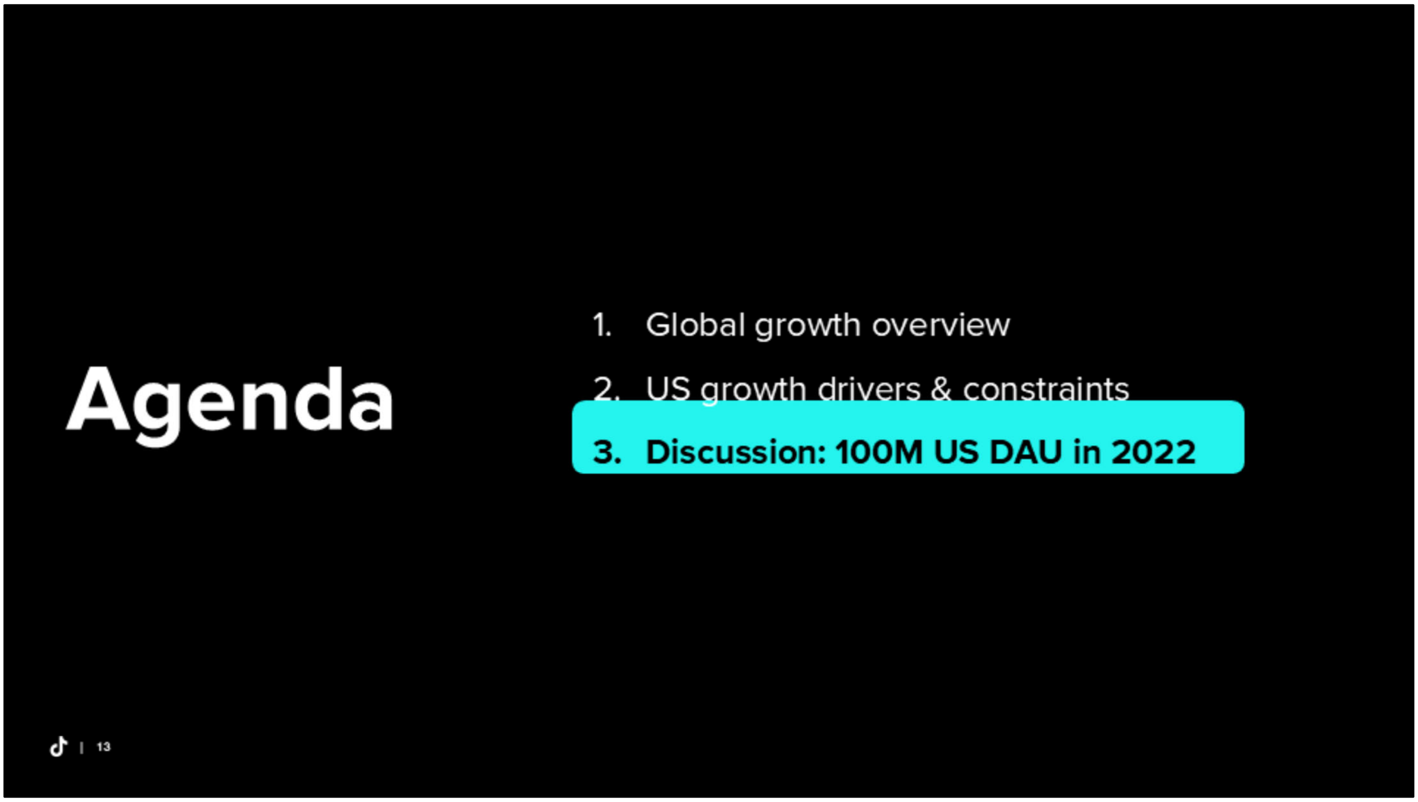
- US is facing growth stagnation this year
- Because of the lower retention rate, the amount of churned users is increasing, leading to lower incremental DAU increase

- US DAU retention rate is on par with other priority markets, but its new user retention is very low compared to other key markets

Age gate
Not login -> age



PGC+publisher (news)
M10N


Agenda
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给排序，最重要的三件事

PGC Taskforce: Importance of PGC

Gaps with YTB and Douyin

- TikTok PGC content is relatively under-developed compared to Douyin and Youtube. User demand of some verticals are not fully met.

	UGC	PGC		
		Overall	Publisher	PUGC
TikTok	🟢	🔴	🟡	🔴
Douyin	🟢	🟢	🟢	🟢
YouTube	🔴	🟢	🟢	🟢

Non-User Perspective

- Non-users have a stronger interest in verticals such **news & current events and local news & events.** They also expect content to be more **informative.**
- More PGC content can enrich the diversity of the ecosystem and offers better values for consumption.

Speaker: [redacted]

PGC Taskforce: Publisher Feedback

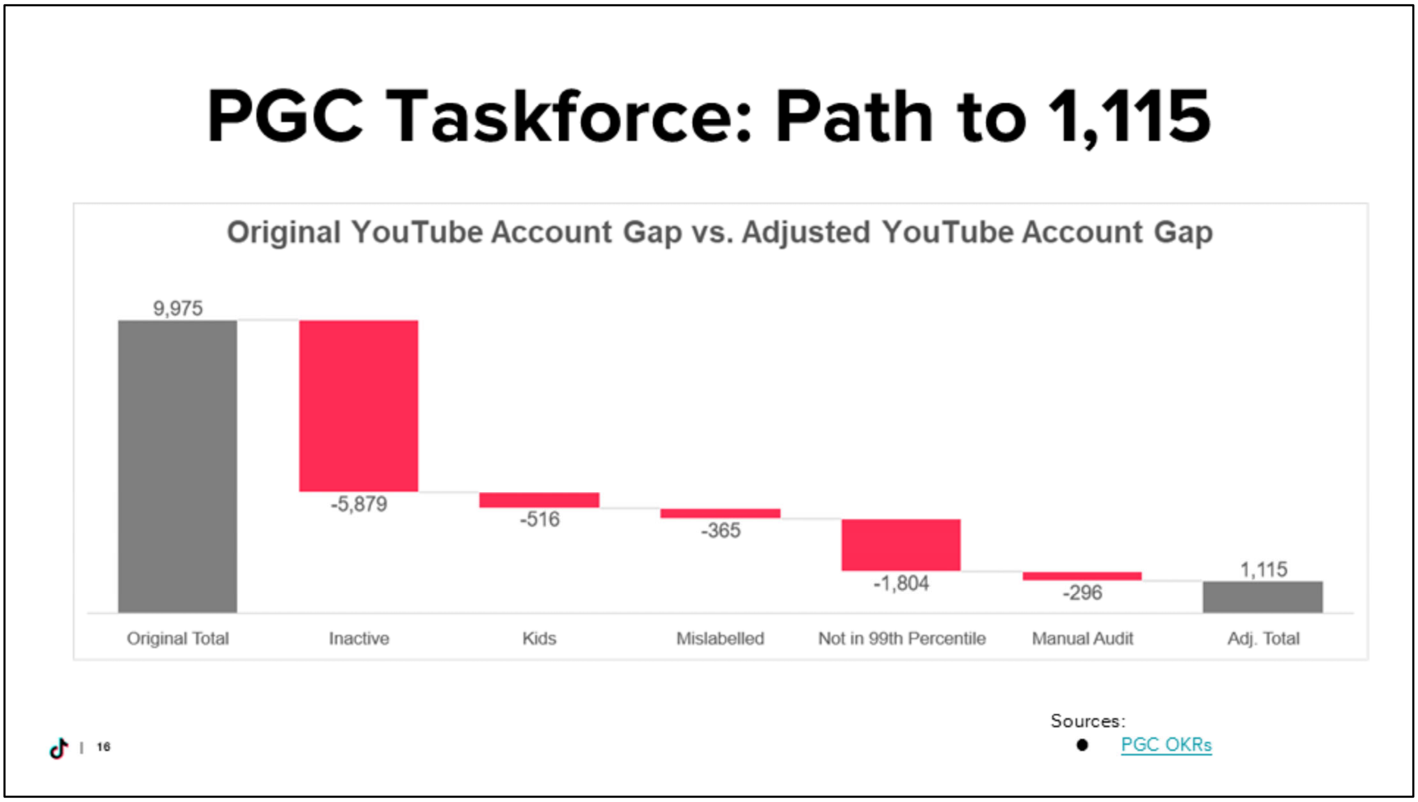
Theme	Challenge
Analytics	Limited analytics make it difficult for publishers to produce better content and to monetize via sponsored brand deals.
Creation Tools	Desktop creation experience is not optimized for PGC content.
Moderation	Overkill on top publisher accounts (NBA, NHL, etc.) and isolation on others (FIFA, Man Utd) leads to poor user experience and diminished PGC content.

Speaker: [redacted]

- PGC feedback
  - I'll talk through the feedback we've heard from publishers. I want to point out that much of this feedback is shared by PGC creators. During the May research trip, high-tier creators also mentioned analytics and editing tools as their top priorities. So, to a certain extent, I think the feedback we hear from publishers will also apply to top PGC creators.
- What do PGC accounts need need?
  - As we heard yesterday, they're looking for advanced analytics in order to understand and improve their content. Also, they rely on this data to monetize via sponsored brand deals.
  - Secondly, they're looking for improved creation tools, like a better backend experience and easier collaboration tools for organizations.
  - Last but not least, we're hyper focused on improving our moderation. The publisher NR rate is roughly double the creator NR rate, and we're seeing many of our top publisher accounts impacted.

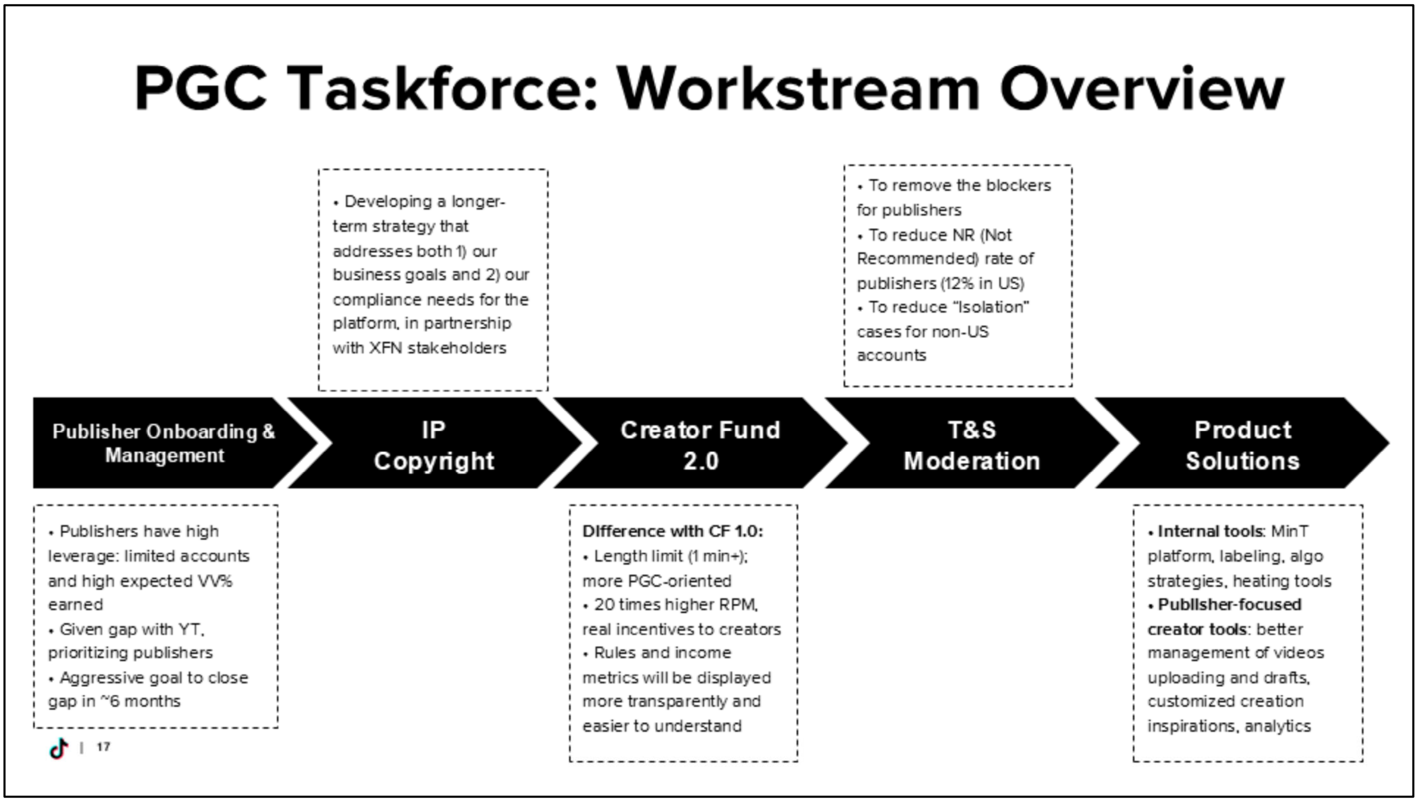
For more detail on how we're addressing this feedback, I'll turn it over to [redacted]

Moderation / analytics / creation



Speaker: [redacted]

- [redacted] did some extensive research into all of the accounts which were on YouTube but not TikTok. Across 7 priority markets
  - From there, we removed all inactive accounts (which was more than 50%).
  - We removed kids accounts and accounts that were mislabelled
  - From there, we confused on accounts which make up



Speaker [redacted]

- Overall, our PGC Taskforce has several workstreams.
- First, we are working with Local Ops teams to onboard publishers as well as optimizing our current portfolios within **7 key markets**: US, UK, France, Germany, Italy, Spain, and Brazil. I'll let [redacted] speak more about this shortly, but our goal is to close the gap with YT in ~6 months, which would mean onboarding **1,115 publishers** by end of February.
- Next, we kicked off a workstream recently with a XFN group a longer-term strategy for how we want to handle IP on our platform. Meaning, based on our business goals and compliance needs, what is our approach to rightsholders.
    - Meaning, there is a **full spectrum** - at the extreme end is **full, longform IP licensing** (e.g., OTT platforms like Netflix), which we have agreed at that for now is a business model we don't want to undertake.
    - On the other hand, **we could be agnostic, and not engage with rightsholders beyond our IP compliance**. Somewhere between those extremes is where we want to operate, and we are building that strategy as as list of proposed partners.
- I'll let [redacted] speak about the next 3 workstreams.

Speaker: [redacted]

- 1,115 on the right at the bottom.
- Above that a callout to Logos of parent companies that showcases the handle clusters.
- Showcase that we are dependent on hitting parent company goals.
- Possibly have the % that are coming from conglomerates vs single handle accounts

Product

Creation

Creative tools needed for high-quality videos:

- CapCut x TikTok growth synergy
- Editor Pro - In App Edit Tool
- Web editor for 1min+ videos → Youtube creators can quickly edit videos to fit TikTok

Better-edited content attracts more users

UGC creation capability to attract high-aged users:

- Encourage **effects** production for the high-aged through open platform

L45 Growth

Social

Relationship buildup: Activate two-way relationship mining; Increase profile identity, improve conversion; Explore pro-active relationship build-up scenarios such as TikTok Now, QR code and Search

Increase publish penetration and density: Add trigger for Story publish; Motivate Social publish behaviors ; Explore new publish scenarios like TikTok Now

Increase friend content consumption and interaction: Improve experience for Friends Tab, Social Push and Inbox; Build repost experience.

Polish DM: Provide access to rich media and improve core experiences for Age 16+ users

Speakers: [redacted]
Creator M10N, 1min+, support operation for PGC -> grow non-UGC videos

Algo

Levers	Objectives	Specific approaches	Estimated DAU gain
New user feed optimization	Deliver safe and attractive new user feed.	1. Improve new user content style by refining new user recommendation content pool to be safe, widely-acceptable and exciting, especially for the first few videos. 2. Accelerate the speed of learning new user interest through algorithm innovation. 3. Partner with product team to improve onboarding experience.	+2% new user retention and +3% staytime gain
Content diversification	Deliver more useful and informative content.	1. Continue growth of long video, PGC content, useful content. 2. Reduce the content badness and improve user brand perception.	+0.2% DAU and +2% staytime
US model relevancy improvement.	Deliver the most advanced recommendation system.	1. Improve recommendation model robustness and predictiveness.	+0.3% DAU and +3% staytime

The algo team's mission is to continue to bring the best forU page experience to our users and inspire users to share their creative ideas. We are also supporting all product innovations. Among all the work ongoing, we think there are 3 work streams that are most critical for US growth, especially for growth among L45 growth.

First, it is new user feed optimization. New user feed leaves the first impression for TikTok users and largely decides whether a newly acquired user want to use TikTok in the long run. In the last half, we resolve multiple feed quality issues in new user feed, and decrease the unwanted content ratio from 10% to 5%; we also discover the impact of login experience to new user retention rate and work with partner team on investigation and improvement. In the next half, new user feed is still a key workstream and we are aiming for 2% retention gain and 3% staytime gain.

Besides, we will keep diversifying US content ecosystem. This is a large workstream for US in the last half. Long video staytime ratio increases by +10% from 20% to 30%, and lipsync ratio drops from 12% to 5%. Besides, we see growth in verticals including entertainment culture and social. We also come up with a metrics called bpscore, brand perception score, to measure the content ecosystem perception from a non-user perspective. The metrics is improved continuously over the last 6 months.

Finally, it is continuous model and ML technology improvement. It is the foundation of delivering relevant and inspiring user experiences and the foundation of all product innovation. We are aiming to build the most advanced recommendation system in the world. To do that, we first need to keep improving engineering excellence and make the system robust. This is critical considering multiple 2% styatime or 1% retention fixes happen in the last few months. Finally, we will continue adopting the most advanced technologies to tackle different challenges.

[redacted]: H2 Key Strategies in closing the penetration gap

Penetration Gap and Bottlenecks

Period	Benchmark	TT-AND-2022		TT-iOS-2022	
	Douyin 2020	U.S	VN-Main	US	VN-Main
Smartphone	1240	116.8	45.8	143.3	24.0
DAU	440	22.4	20.7	62.8	11.2
DAU Penetration	35.5%	19.1%	45.2%	43.8%	46.7%
DAU Ceiling	650	23.4	23.8	62.3	14.7
Penetration Ceiling	**52.4%**	**20.0%**	**51.9%**	**43.5%**	**61.2%**
DNU	1.62	0.19	0.08	0.65	0.09
DNU-Device Check	-	-	-	0.16	0.03
DNU/Smartphone	**0.13%**	**0.17%**	**0.18%**	**0.11%**	**0.12%**
DNU D1R - DID	59.45%	52.8%	69.0%	42.4%	67.3%
DNU D1R - DC	-	-	-	57.20%	71.6%
LT - DID	**401**	**121.0**	**294.5**	95.8	169.7
LT- device check	-	-	-	141.2	170.7

Key Action Items

U.S DAU penetration ceiling is ~ 20% on Android market and 43.5% on iOS market, lagging behind Douyin and TT-VN, to breakthrough bottleneck:

DNU: reaching the 0.2% smartphone penetration goal

1.1 Paid DNU:

Android paid ads and OEM: accelerate paid DNU from 98K→127K, +30%
iOS: locate correct strategy, ramp-up 'real DNU' growth with Apple device check
Localized Creative Strategy by using Brand Generated Content, Creator Content and Hyper Local creatives.

1.2 Non-paid and organic DNU growth :

Web and share DNU: breakthrough on SEO and sharing optimization, boost DNU 17k-->23k, +32% (Android + iOS DC new)

Organic DNU & churn users: promote organic DNU growth and churn re-activation through emerging levers (ASO, EDM, Push)

LT: optimize toward the optimal goal of LT all = 250

Leverage UG's user and channel insight to support algo team on good content mining, improve NU experience and L45 retention

Data period: 2022.6.1 - 2022.6.30, penetration ceiling is calculated by DNU * LT all
DC: DC (Device check) is a service from Apple that can be used to help developers in identifying real new devices from DNU, under which U.S iOS DNU will be shrunk to~160K from 650K

Speaker [redacted]

MKT

Build relevance & usefulness to ultimately build Trust

- Launch H2 campaign to increase Trust through the 2 key user perception drivers - Relevance & Usefulness
- T&S Product Marketing: Improve Safety perception through Minor Safety targeting parents, #SaferTogether & Screentime management campaigns
- Build "Red State" strategy with GR/PR using hyper local focus (SMB Showcase, relevant tentpoles in these markets e.g., College sports, NASCAR)

Unlock L45 by removing perception barriers

- PGC amplification campaign in Q1 '23 (build in H2)
- Product education: Search & discovery; social features (Friends Tab, DM, etc)

Widen/Establish differentiation from our competition

- Accelerate/own trends through rapid marketing approach
- Creator community growth via promotion of m10n & Creation Tools (e.g. Creator Next, Effect House, Editor Pro, CapCut), recognition programs
- Product amplification
  - LIVE: drive engagement and positive impact stories, beyond one-off tentpoles
  - Push Gaming content and creators to drive longer session duration and frequent usage (DAU), currently low association with this category

MKT - Estimated Impact

- For large-scale media campaigns, we can measure with the ROI/MMM model that we built for TikTok Taught Me.
  - DNU, Reactivated DAU, Relative CPI vs. UG campaigns
- Control/exposed BHT Campaign tracking for Trust, Relevance, Usefulness & other perception/sentiment uplifts
- In-app metrics - feature adoption/penetration

US Content

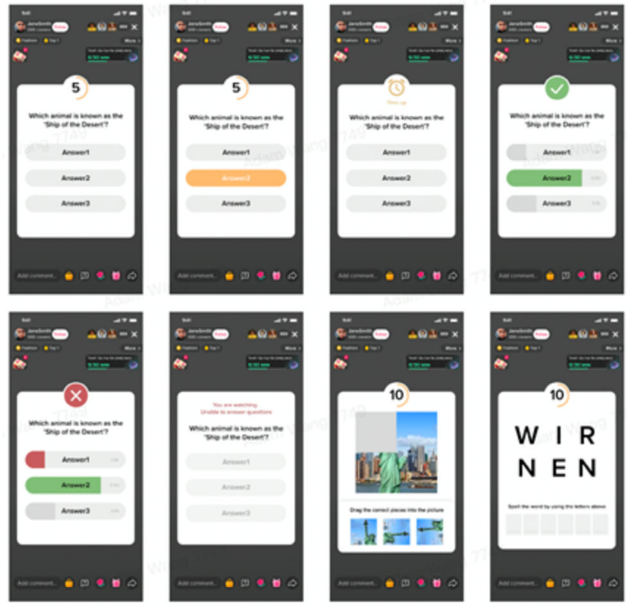
Opportunity	Rural growth	L45 growth	User Retention
Proposed Solutions	**1. Lean into rural audiences in priority categories, starting with (but not limited to) Music and Sports** **- Music:** CMAs, Stagecoach, country artists, TikTok showcases **- Sports:** Nascar (Daytona 500), College Football (Bowls), Fishing	**2. Give new users, especially L45, a better web experience** - *Search + Control* → curated web editorial and trends, optimized web search (e.g., search tab), "see/search more like this" on videos **3. Prioritize L45-appealing Comedy** - Highlight L45 Comedy sub-genres and trends in programming **4. Optimize tools/effects for L45** - Additional TTS options, video templates, education in creation flow	**5. Reduce new user exposure to videos that require knowledge of TikTok trends** - Test stricter NUF first load audit guidelines, reducing videos surfaced that require trend knowledge, and paired content curation for new users - Consider how trend knowledge should factor into process flows to surface trends for XFN promotion

Speaker: [redacted] *establish TT as a useful content - #2, #1; also note that #3 and #4 also are achieved by PGC taskforce

Live

Cohesive end-of-year campaign focused on creating more engagement + appeal to L3/L4/L5 to participate -- combination efforts across TTops, LIVE, UG, and GBS.

Build stronger creator <> follower relationships on LIVE, with a heavy emphasis on creating sticky viewing experiences such as subs.



GBS

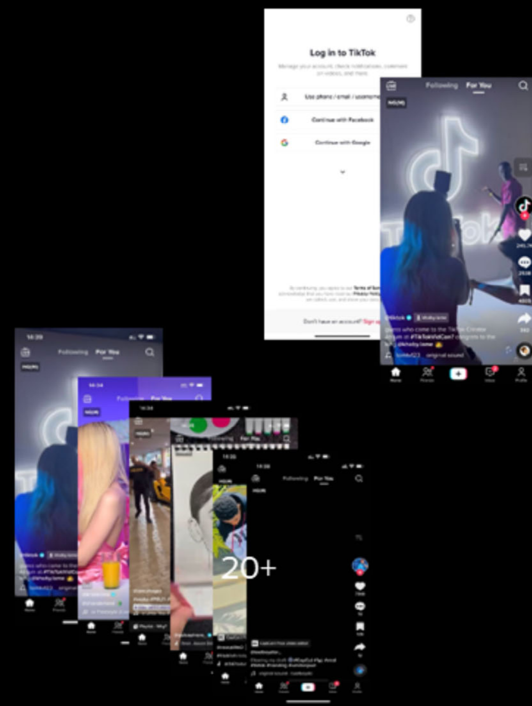
Premium TopView advertisers to mitigate against DAU decline.

Appendix

Definitions of different moment

- **Set up moment**
  This moment is when a new user experiences the core functionality of TikTok, which is their first video view in for you feed after register.

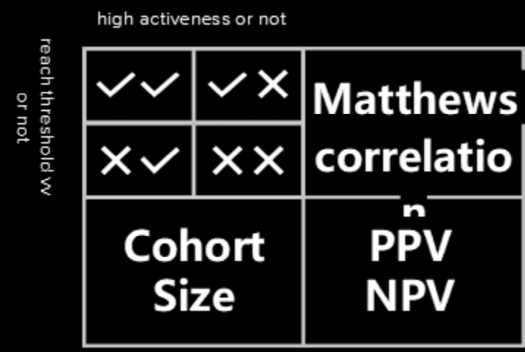
- **Aha moment**
  In TikTok, this moment is more than 20 video views in for you feed.
  It means a moment when a new user find content on TikTok amazing/interesting/great, after which, his or her long-term retention data will be greatly improved. Furthermore, this moment has strong correlation with Habit moment.



- Habit moment

In TikTok, it's 260 video views in users' first week. Users who achieve this goal are likely to remain highly active for the next following weeks

This moment refers to a threshold of video views after which users will remain a high activeness in the future, which means high correlation and PPV, bigger cohort size in analysis.



if reach n hot vv	corrlation	cohort size	PPV	NPV
10	0.273	2,060,539	90.72%	43.85%
50	0.394	1,543,676	86.40%	52.79%
100	0.421	1,339,116	84.16%	56.74%
180	0.436	1,148,649	81.79%	60.64%
260	0.440	1,010,535	79.84%	63.58%
500	0.427	781,952	76.31%	68.30%
800	0.394	597,062	73.03%	71.79%
1,200	0.354	452,491	70.45%	74.18%