

AMENDED Exhibit 528

PLAINTIFFS' OMNIBUS OPPOSITION TO DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT

Case No.: 4:22-md-03047-YGR

MDL No. 3047

In Re: Social Media Adolescent Addiction/Personal Injury Products Liability Litigation

TikTok Push Overview

2022 Jan. 吴含笑 于飞

The document aims to give internal and external stakeholders an overview of push notification business and our planning on it from the 6 dimensions:

- Value Judgement
- Product Framework & Strategy
- Content Safety & Quality
- 2024 Achievements (可略)
- Future Planning (可略)
- XFN Collaboration (调整)

What't push notification?

Push notifications are messages that can be sent directly to a user's mobile device. They can appear on a lock screen or in the top section of a mobile device, or in the .

Commented [1]: 类比 FYF, 体现 push 是个小的推荐系统, 引导听众



What's push used for?

Push messages as a way to widely inform users of information, are both valuable for the platform and users.

pushpin

From the platform perspective, push notifications...

- * **Engage users**
 - Drive activeness: directly awake users
 - Lengthen stayduration: better engage users to stay in the app, socialize

with others, consume and produce more videos

- Improve business penetration: encourage users to explore new features

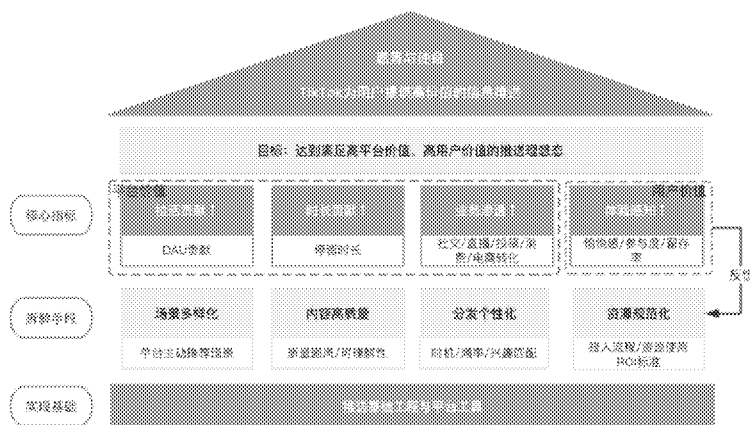
* **Improve brand image:** widely impact users' experience and build the positive platform image and positioning.

From users' perspective, push notifications...

- * **Provide information timely:** Meet the needs of users for timely access to subscription content updates, hot information, station popularity, and functional service reminders
- * **Satisfy users' socialization needs:** Keep updated of the current situation of friends and meet communication demands; establish new social relationships and expand social circles

In a word,

Push's value = platform value + user value = Delta DAU + Stayduration impact + business penetration + experience perception



Based on the value chain above, we can evaluate the benefits from the 3 perspectives of user growth, business penetration and brand image building.

Values	Target	Metrics	
Platform Value	Higher User Growth	Delta DAU, Avg.active days	
	Longer Time	Stayduration	* Send Count

	Consuming		* Click Count
	Deeper business penetration	Penetration% on social/live business	* CTR
User Value	Better user experience	* Dismiss rate * opt-in/out rate * uninstall rate * negative feedback rate (from feedback button)	

What're we aiming for?

The goal is to activate users and increase usage time, serve the penetration of vertical business, and simultaneously ensure and improve user push experience.

Benchmarking other competitors, there is still room for DAU contribution growth of 1%, time spent contribution growth of >2%, and strong need in establishing user experience indicators.



We evaluate the impact on DAU, time spent and business penetration by viewing the reverse experiments of cutting down push notifications sending.

How is Push Product Design and Strategy?

If we want to send a push, we should solve this problem: When do we send what content to what kind of users for what purpose.

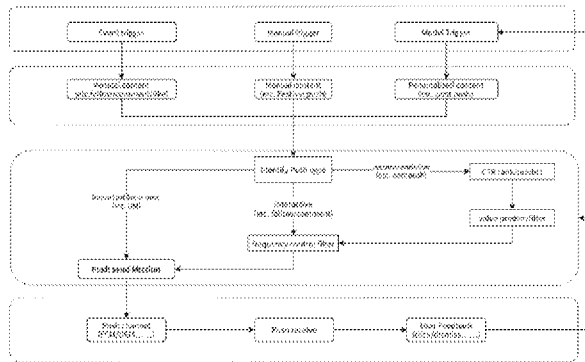


Who/When: Push trigger
Find the best user and timing for various recommendation targets

What: Content Candidate
Avoid content security risk and introduce content

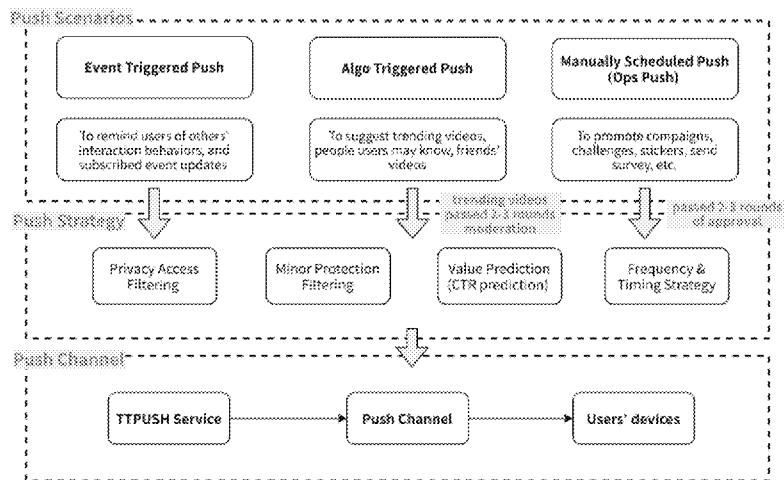
Why: Recommendation System
Rank candidates and determine what push should be sent

How: Push Consumption
channel construction and emit user feedback signal



How to guarantee safety & quality?

Commented [2]: policy 在哪些维度？跟 feed 比标准是更严还是更松；流程怎么生产出来的



Overall principles

All push types follow the account/video privacy principles and minor protection principles.
(Details please refer to [HYPERLINK

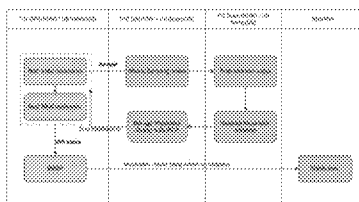
and [HYPERLINK

Guidelines and processes applied on manually selected push content

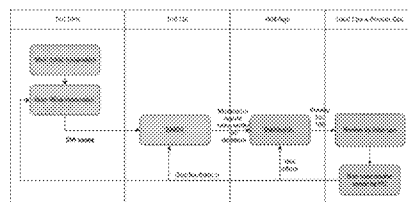
- * Interest Push ([HYPERLINK

Policies: screening appropriate content used in off-app promotion that aims to offer high-quality content to users, build positive brand image, maintain platform neutrality, and increase user growth and retention. [HYPERLINK

Processes: Streamlined moderation, sampling&arbitration and topcase review processes to evaluate quality and efficiency metrics, guaranteeing content quality on push texts, videos and miniatures.

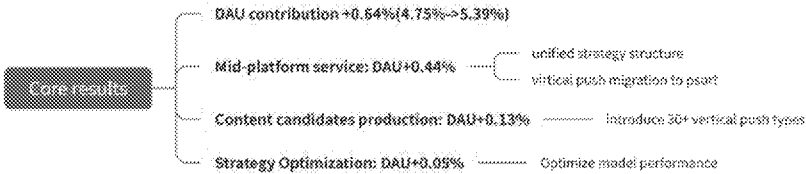


Moderation and Arbitration Process



Weekly Topcase Review Process

2021 Achievements



Content Quality

Rolled out Push dedicated moderator groups in x queues, covering labelling and modifying content for 61% TikTok users in 26 markets, and x more to go. Accuracy has grown from 68% to 96% and mis-releasing risks are more manageable (<2,5%) due to timely sampling&arbitration process and weekly topcase review.

Resources Management

Launched a standardized push requirement review process to reply XFN push product iteration requirements

Looped [HYPERLINK] and launching [HYPERLINK]

Industry insights & User Experience

Investigated domestic and overseas apps, output [HYPERLINK] and [HYPERLINK] clearer [HYPERLINK] and generated much [HYPERLINK]

Through [HYPERLINK], [HYPERLINK], we get to know the real situation of user experience and their satisfaction, and dig out the pain points of push frequency and content low-relevance issues.

Future Planning

Module	Project	Expecting DAU contribution	Reference
Trigger	More personalized push strategy, like personalized	0.1%	[HYPERLINK]

	timing strategy.		HYPERLINK HYPERLINK HYPERLINK HYPERLINK valuing push by calculating last sending interval, DAU+0.0295% The best sending hour is positively related to users' frequent active hours. [HYPERLINK
Recomm endation	Improve content cold start capability. Introduce author&content side features to rank model.	0.1%~ 0.2%	[HYPERLINK HYPERLINK HYPERLINK

[REDACTED]

HYPERLINK

[REDACTED]

HYPERLINK

[REDACTED]

add author-user
relationship & live
content features,
DAU+0.07%

[HYPERLINK

[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

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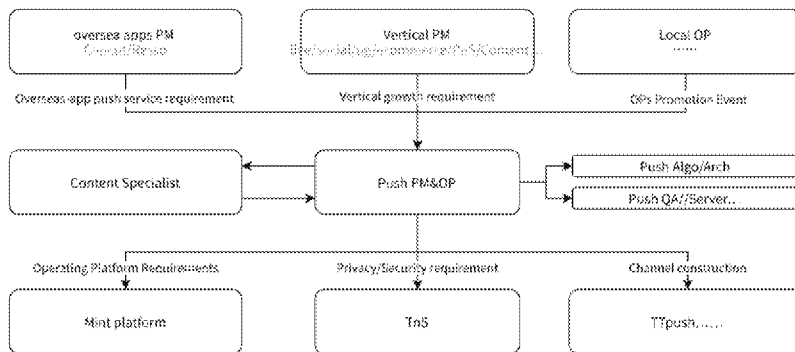
HYPERLINK

[REDACTED]

			add user location/portrait&content tag features, DAU+0.07%
	Enrich our target metrics to better optimize the DAU impact, such as dismiss rate&opt-in rate.	0.3%	Live push -0.1% DAU from backtest Opt-out rate increase have negative impact on DAU in long-term.[HYPERLINK
Content candidates	Increase text interpretability to improve CTR.	0.1%	Change the display name from username to nickname, DAU+0.011% [HYPERLINK "
	Introduce more personally related content. * like google Map's 'You are in a business district with many shopping malls, do you want to go?'	0.2%~0.4%	[HYPERLINK DAU in Douyin Lite +0.0666%, DAU in Douyin +0.027% [HYPERLINK "Qq3y86" \h] - 30d average active days+0.0931%, 1d average active days

			+0.0597%
Consumption	Optimize notification opt-on guidance & iterate channel by strengthening reachability	0.2%	[HYPERLINK [REDACTED]]]
			DAU+0.124%

XFN Collabroration



Commented [3]: 重点放在跟其他 pm 工作的相关性

Commented [4]: 历史合作的项目；未来启发

Appendix

[HYPERLINK [REDACTED]]

[HYPERLINK [REDACTED]]