DELISTED MOBILE APPS REPORT



Q2.2022

An analysis of delisted apps across the Google and Apple app stores





TABLE OF CONTENTS

Key Stats	. 3-5
Google and Apple Store Analysis	6-14
Country of Registry Analysis	15-20
Category Analysis	21-2
Likely Child-Directed App Analysis	25-29
List Top 10 Apps by Store	30-32
Methodology and disclaimer	31-34

App Delistings

Apps can be delisted for a variety of reasons, spanning from relatively nefarious (e.g. app store policy breaches) to benign (e.g. developer withdrawal). Pixalate is neither asserting nor assigning a reason for any delisting action. Additionally, the initiator of the delisting is not generally publicly-available information, so it is often not possible to know whether the removal was triggered by the app store or the developer.

Pixalate is sharing this data not to impugn the standing or reputation of any person, entity or app, but, instead, to report opinions as they pertain to delisted Android and iOS apps.

KEY STATS: DELISTED MOBILE APPS IN Q2 2022

AS OF THE END OF Q2 2022: AS MEASURED BY PIXALATE



592k+ delisted apps across Google (153k), Apple app stores (439k) in Q2 2022



64%+ of delisted apps on Apple were abandoned (2+ yrs. no update) vs. 20% on Google



8,652% increase in apps delisted from the Apple App Store from Q1 to Q2 2022



35 Sberbank apps (sanctioned, Russian state-owned bank) delisted across Google and Apple



"100x increase in 'Health & Fitness' apps delisted from Apple in Q2 2022, including 178 'Family Planning' apps



49k+ delisted apps in Q2 2022 were likely child-directed; nearly 15k of which had **no detected privacy policy**

592k+ APPS DELISTED ACROSS GOOGLE, APPLE IN Q2 2022

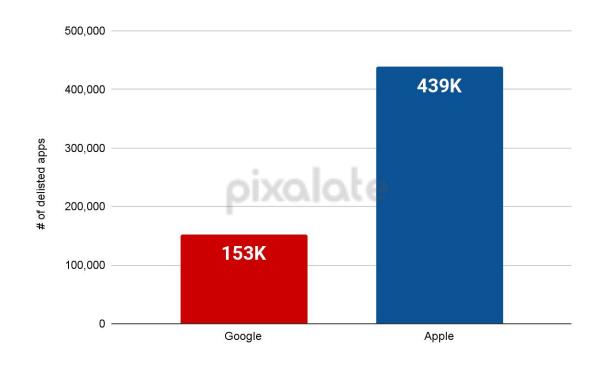
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

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74%

of delisted apps came from the Apple App Store, or about 439k apps, according to Pixalate's data.





APPS DELISTED FROM GOOGLE HAD 77MM+ USER RATINGS

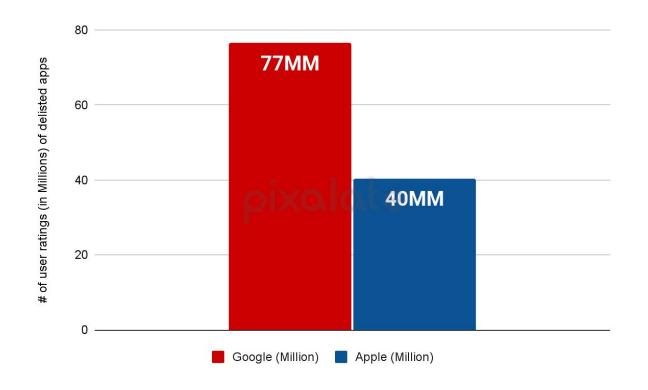
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

pixalate

117M+

User ratings accumulated on apps prior to delisting, according to Pixalate's data.





* Programmatic ad sales used as a proxy for ad spend; Ad spend estimates are for the whole quarter, including before and after the app was delisted

2.8%

of apps in Google store had detected programmatic ads prior to delisting and less than 1% in Apple store, according to Pixalate's data.

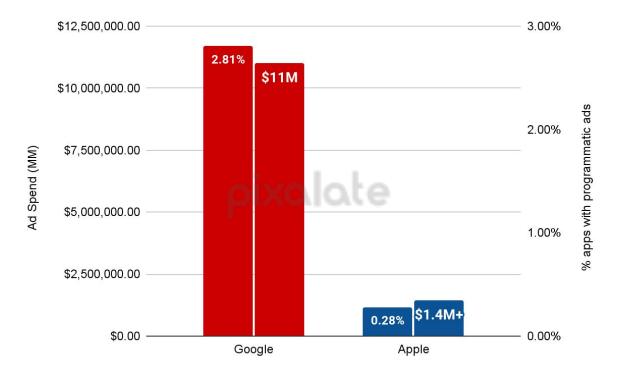


Want to see all the apps? Schedule a demo: pixal.at/demo

\$11MM+ AD SPEND IN DELISTED APPS Q2 2022

AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

pixalate



35 SBERBANK (RUSSIAN BUSINESS) APPS DELISTED IN Q2 2022

AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

pixalate

35

apps registered to "Sberbank" were delisted in Q2 2022, according to Pixalate's data (Sberbank is a U.S.-sanctioned Russian state-owned business).





DELISTED APPS: Q2 2022 GOOGLE AND APPLE STORES



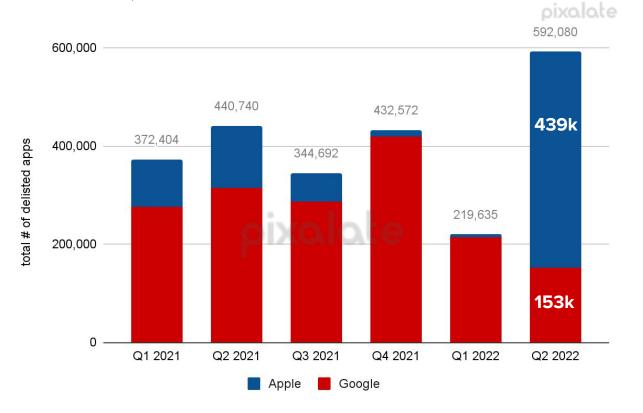
2.7x MORE APPS DELISTED IN Q2 2022 VS. Q1 2022

AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

439K

Delisted apps from the Apple App Store in Q2 2022, the most delistings in a single quarter from either app store since at least Q1 2021.





1.6MM+ DELISTED APPS FROM GOOGLE STORE SINCE 2021

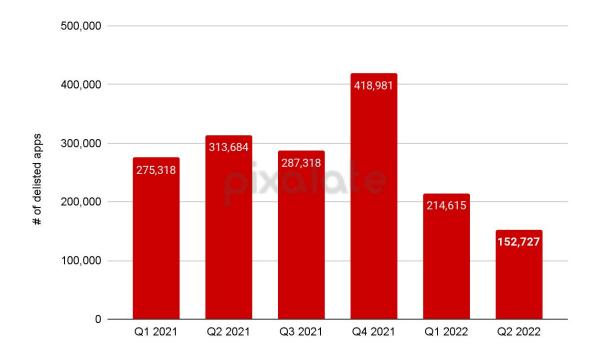
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE



367K

Delisted apps in Google Store in H1 2022, according to Pixalate's data.





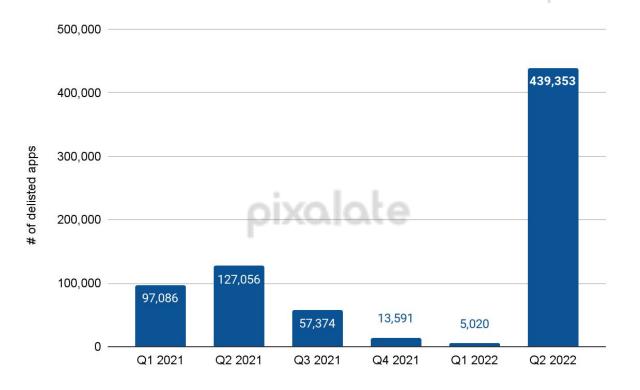
87x INCREASE IN # OF APPS DELISTED FROM APP STORE IN Q2 2022

AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

440K

Apps delisted from Apple App Store in Q2 2022 up from 5,000 in Q1 2022, an increase of 87x according to Pixalate's data.





64% OF DELISTED APPLE APPS WERE 'ABANDONED'

AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

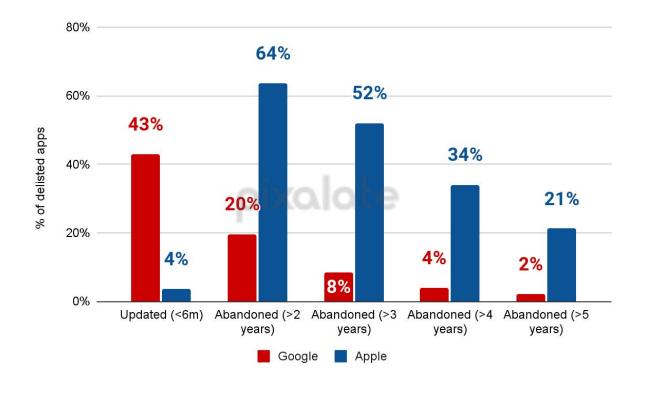
pixalate

20%

of delisted apps from Google were "abandoned"* compared to 64% from Apple, according to Pixalate's data.

*Abandoned apps current version release date was > 24 months

*Updated apps current version release date was < 6 months.



95%+ DELISTED APPS HAVE NO DETECTED TERMS OF SERVICE

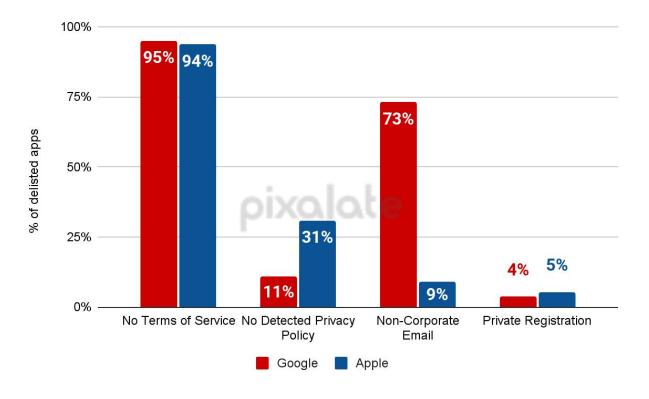
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

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25%

of delisted apps had no detected privacy policy prior to delisting (11% Google, 31% Apple), according to Pixalate's data.





47% OF APPS DELISTED FROM GOOGLE HAD POTENTIAL ACCESS TO PERSONAL INFO THROUGH PERMISSIONS

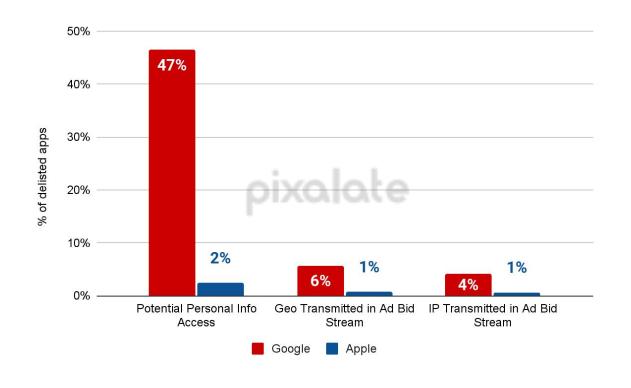
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

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of delisted apps from Google shared location data in the ad bid stream prior to delisting, according to Pixalate's data, compared to 1% among apps delisted from Apple's store.





DELISTED APPS - Q2 2022 COUNTRY OF REGISTRY





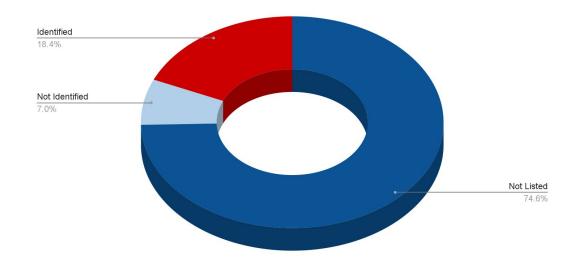
AS OF THE END OF Q2 2022: AS MEASURED BY PIXALATE

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483K+

delisted apps from Google in Q2 2022 had no listed or no identified country of registry, according to Pixalate's data.





GOOGLE STORE: USA, RUSSIA AMONG TOP 5 IN DELISTED APPS

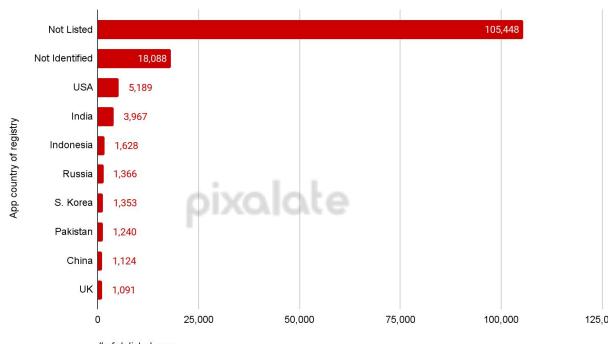
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

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123K+

delisted apps from Google in Q2 2022 had no listed or no identified country of registry, according to Pixalate's data.





APPLE STORE: USA, CHINA AMONG TOP 5 IN DELISTED APPS

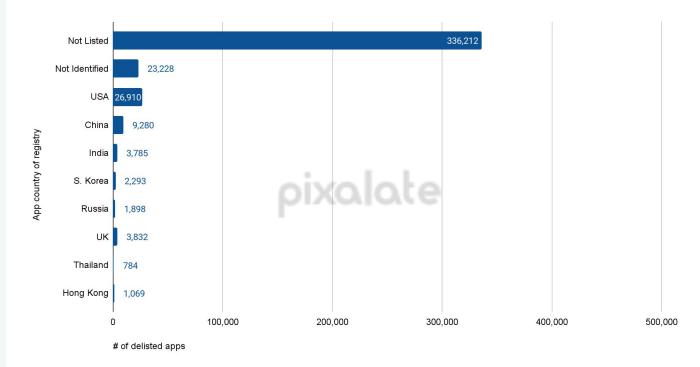
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

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359K+

delisted apps from Apple in Q2 2022 had no listed or no identified country of registry, according to Pixalate's data.





41K USA-REGISTERED APPS DELISTED IN H1 2022

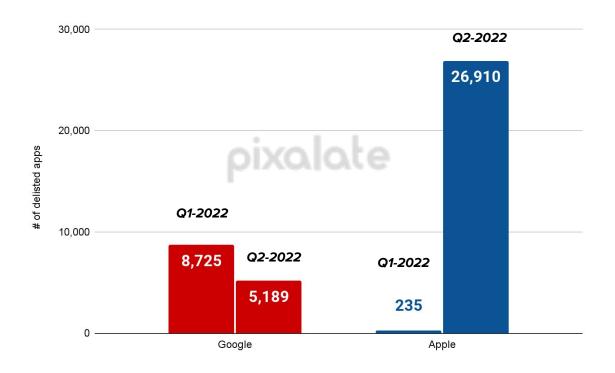
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

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27K

U.S.-registered apps delisted from Apple App Store in Q2 2022, according to Pixalate's data.





6.5K UK-REGISTERED APPS DELISTED IN H1 2022

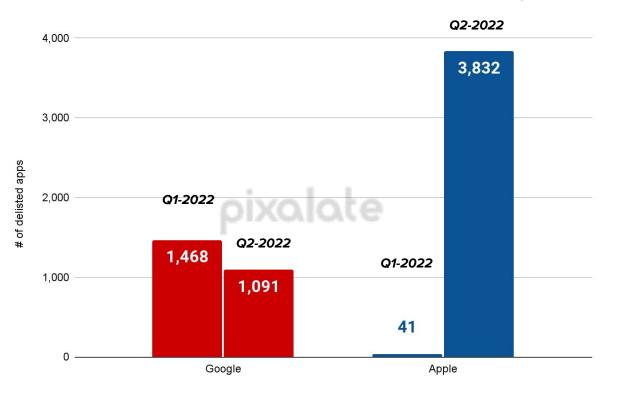
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

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6.5K

UK-registered apps delisted from Apple App Store in Q2 2022, according to Pixalate's data.





DELISTED APPS - Q2 2022 CATEGORIES

Focus: Health & Fitness Category



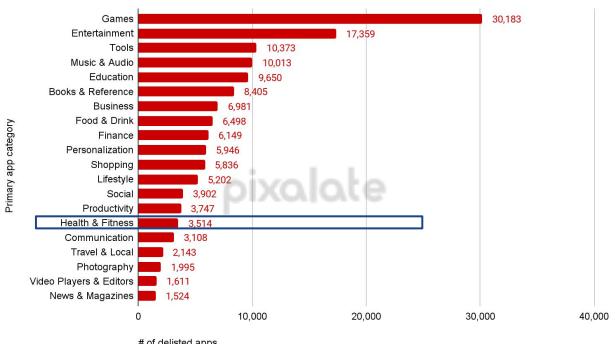
GOOGLE STORE: GAMES, ENTERTAINMENT, AND TOOLS TOP 3 IN DELISTED APPS

AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

3.5K+

Delisted apps in Health & Fitness category from Google Store in Q2 2022, according to Pixalate's data.





APPLE STORE: GAMES, BUSINESS, EDUCATION TOP 3 IN DELISTED **APPS**

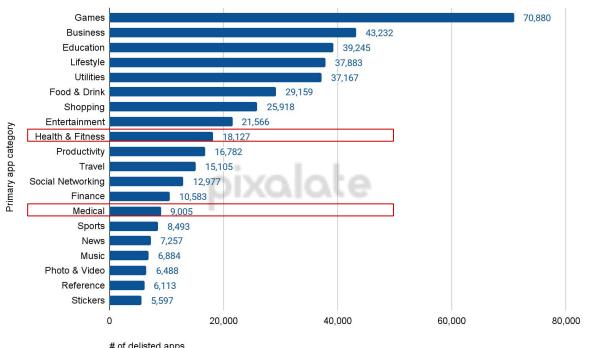
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

27K+

delisted apps in Medical, and Health & Fitness categories from Apple Store in Q2 2022, according to Pixalate's data.



Want to see all the apps? Schedule a demo: pixal.at/demo



of delisted apps



NEARLY 100X INCREASE IN 'HEALTH & FITNESS' APPS DELISTED FROM APPLE FROM Q1 2022 TO Q2 2022

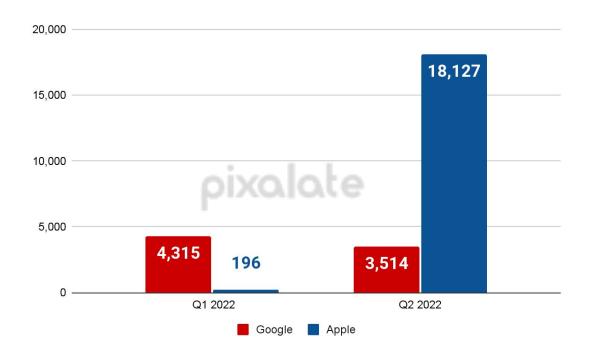
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

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21K+

total delisted apps in 'Health & Fitness' categories in Q2 2022, according to Pixalate's data.





DELISTED APPS - Q2 2022 LIKELY CHILD-DIRECTED APPS



49K+ DELISTED APPS (IN Q222) WERE LIKELY CHILD-DIRECTED

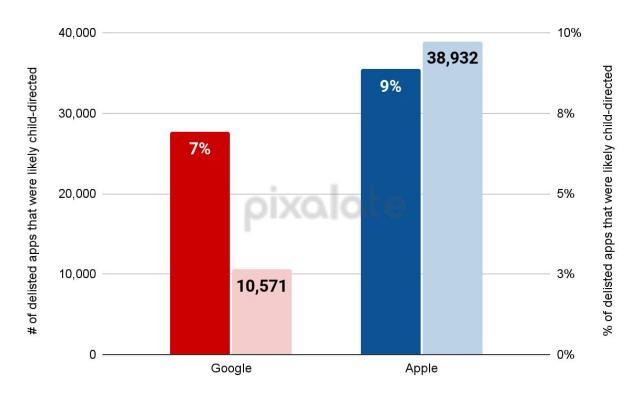
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

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9%

of delisted apps in Apple Store were likely child-directed, according to Pixalate's data.





DELISTED CHILD-DIRECTED APPS: 14K+ HAD NO DETECTED PRIVACY POLICY

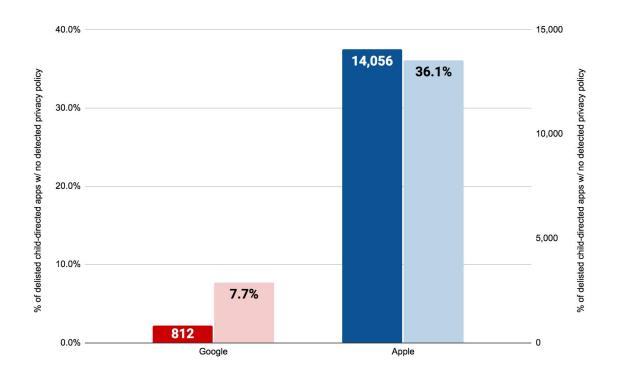
AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE



14K

likely child-directed apps that were delisted across Google and Apple in Q2 2022 had no detected privacy policy, according to Pixalate's data.





DELISTED APPS - Q2 2022 TOP 10 LIST BY STORE





GOOGLE PLAY STORE: TOP 10 DELISTED APPS (by downloads)

AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

Popularity Ranking	Store	App ID	Title) Title		Downloads Developer		Country Of Registry		
1	Google	com.samsung.android.privateshare	Private Share	(है)	500MM+	Samsung Electronics Co., Ltd.	S. Korea				
2	Google	ru.sberbankmobile	СберБанк Онлайн — с Салютом	6	100MM+	Sberbank of Russia	Russia				
3	Google	com.asus.gallery	ASUS Gallery		100MM+	Mobile, ASUSTek Computer Inc.	Taiwan				
4	Google	com.spacegame.homedesign	My Home - Design Dreams	A S	100MM+	ZenLife Games Ltd	Singapore				
5	Google	com.puppy.merge.town	Puppy Town - Merge & Win		50MM+	MeetJoy Studio	Not Listed Ø				
6	Google	com.privacystar.android.metro	Metro Name ID	ID	50MM+	PrivacyStar	USA				
7	Google	com.Atto.Beyond.cleaner	Smart Clean-Booster,Cleaner	*	50MM+	lj1831952@gmail.com	India				
8	Google	com.zenjoy.slideshow	Music Video Maker: Slideshow		50MM+	Video Note LLC	USA				
9	Google	com.zentertain.videoflip	Photo Video Editor	Sin A	50MM+	Video Note LLC	USA				
10	Google	com.netease.chiji	RULES OF SURVIVAL		50MM+	NetEase Games	Hong Kong				





APPLE APP STORE: TOP 10 DELISTED APPS (by user ratings)

AS OF THE END OF Q2 2022; AS MEASURED BY PIXALATE

Popularity Ranking	Store	App ID	Title		User Ratings Developer		Country Of Registry	
1	Apple	1448327606	刷宝短视频	刷宝	1.5MM+	Hainan Toujiao Information Technology Co., Ltd	Not Listed	Ø
2	Apple	1020114152	影视大全-电影电视剧视频播放器	影视 大全	725K+	Jianxin qin	Not Listed	Ø
3	Apple	1363863879	Merge Plane - Best Idle Game		675K+	Shannan Klwx Technology Co., Ltd.	Not Listed	Ø
4	Apple	1065781769	Houseparty		600K+	Life On Air, Inc	USA	
5	Apple	1425710440	Idle Capitalist		450K+	Shannan Klwx Technology Co., Ltd.	Not Listed	Ø
6	Apple	995112030	U by BB&T	U	400K+	BB&T	USA	
7	Apple	834878585	消灭星星®-Popstar官方正版	STAR	400K+	Zplay (Beijing) Info. Tech. Co.,Ltd.	China	
3	Apple	969671652	BBVA United States	BBVA	325K+	BBVA USA	Spain	
9	Apple	1131873369	Messaging for WhatsApp on iPad		300K+	Burak Acemoglu	Not Listed	Ø
10	Apple	599575243	Vinted.pl: Moda vintage online	V	300K+	Vinted Limited	Not Listed	Ø



METHODOLOGY & DISCLAIMER



METHODOLOGY

General

Pixalate's data science and analyst team analyzed apps developers delisted from the Google Play Store and Apple App Store during Q2 2022 (April 1 through June 30, 2022). Data derived from crawls of the respective app stores performed by Pixalate or one of Pixalate's third party licensors.

Delisted Apps

An app is considered delisted if it existed in a given app store and then it was removed. Delisted apps are calculated at the month granularity level, i.e. all the app removals are grouped together according to the month they occurred. Delisted apps cannot reflect the initiator of the delisting action, i.e. Google, Apple, or the app developer. Also, if an app is delisted in a given month but is later added back to the store, it will be counted as delisted only until the month it was added back.

Country of Registration

The country of registration for a given app is determined only if a) the app has a physical address published in its app store page, or otherwise b) from the registrant physical address of the publisher domain listed in the app store page excluding privately registered ones. If none is available, the physical address associated with an app cannot be determined.

Downloads, user ratings, and 'Family Planning' Apps

Top 10 lists referred to within this report are determined based on the published number of downloads (Google Play Store) or user ratings (Apple App Store); Apple Store does not provide download values. "Family Planning" apps are any app with the words "period" or "pregnancy" in the title (English language only), excluding apps with "periodic" in the title.

Abandoned and Updated Apps

Pixalate uses the date in which the app was last updated to determine the degree of apparent abandonment. Abandoned apps current version release date was 24 months+, and updated apps current version release date was 6 months-.

DISCLAIMER

The content of this report reflects Pixalate's opinions with respect to the factors Pixalate believes may be useful to the digital media industry. Any data shared is grounded in Pixalate's proprietary technology and analytics, which Pixalate is continuously evaluating and updating. Any references to outside sources should not be construed as endorsements. Pixalate's opinions are just that, opinions, which means that they are neither facts nor quarantees.

Pixalate is sharing this data not to impugn the standing or reputation of any entity, person or app, but, instead, to render opinions and report trends pertaining to apps available for download via the official Apple App Store and Google Play Store.

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ABOUT PIXALATE

Pixalate is the market-leading fraud protection, privacy, and compliance analytics platform for Connected TV (CTV) and Mobile Advertising. We work 24/7 to guard your reputation and grow your media value. Pixalate offers the only system of coordinated solutions across display, app, video, and OTT/CTV for better detection and elimination of ad fraud. Pixalate is an MRC-accredited service for the detection and filtration of sophisticated invalid traffic (SIVT) across desktop and mobile web, mobile in-app, and OTT/CTV advertising. www.pixalate.com



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