



Executive Summary

For most marketers and app developers, App Store Optimization is an unsolved mystery. The process of reaching a prominent ranking spot for relevant keywords relies mostly on data which remains unavailable to anyone but staff members on Google Play and Apple's app stores.

Therefore, it is not surprising to find various platforms that claim to provide marketers and developers with an easy solution. These tools aim to help users discover the most relevant search terms, and guide them on their quest to determine which terms to include in their app description and chosen keywords section.

We set out to examine four of the main tools available: App Annie, Mobile Action, Sensor Tower and MobileDevHQ, as well as another popular keyword suggestion tool – Google's Keyword Planner. The following research tracked identical terms on each platform, in order to present app marketers and developers with a comprehensive image, and highlight the differences between the above-mentioned platforms.

The research tracked fifty search terms in five leading categories, and compared the data for each one of the main factors measured: Traffic rate, Difficulty rate and the number of competing apps.

The overwhelming difference from one tool to the next has managed to surprise even ASO veterans such as ourselves.

Some of the key differences include:

- ▶ Traffic data comparison for the term "songs" showed a 100% traffic rate on MobileDevHQ, compared to 61% on Mobile Action, 44% on Sensor Tower and only 20% on Google's Keyword planner.
- ▶ The term "photo" produced significantly different difficulty rates for each tool measures: 95% on MobileDevHQ, 71% on Mobile Action, 62% on Sensor Tower and only 30% on Keyword Planner.
- ▶ We have encountered a gap of over 860% in measured competition rates between the official Apple Appstore and Mobile Action on more than one occasion.

The dramatic results led us to a number of conclusions regarding the accuracy and certainty that are available to users opting for either one of the tools.

Some of the main findings and conclusions include:

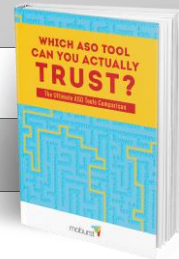
- ▶ Marketers cannot rely solely on one tool in attempting to conduct keyword research independently.
- ▶ Each ASO platforms offers users different aspects to support their ASO efforts.
- ▶ In some cases, the difference in rates suggests a fundamental problem in measuring methods, or even a lack of accuracy.

While each tool offers interesting and worthy advantages that users should absolutely include in their ASO efforts, the lack of clarity increases the already-present need for professional know-how and expertise in conducting a thorough ASO keyword research.



Table of Content:

Chapter Title	Page
Executive summary	
Introduction to ASO	5
Objective & Methodology	6
Features Comparison	7
Features scan summary	10
Traffic Data Comparison	11
Difficulty Data Comparison	14
Competition Data Comparison	17
Conclusions	20
About Moburst	22





An Introduction to ASO

App Store Optimization is the process of improving the app download page in the App Store, in order to increase organic traffic and download-volumes, and reach a prominent ranking position for relevant, sought-after search queries.

The primary goal of ASO is to increase the app's discoverability rate. The second is to convert page visitors into installs and eventually to loyal, paying users through compelling text and visual components.

Successful ASO will deliver free and organic traffic of the highest quality, and is the most cost-effective way of reaching potential users browsing for an app.

The keyword research conducted as part of the ASO process measures the following factors:

1. Traffic rate – represents the volume of App Store users searching for the chosen term. Users should aim for keywords with the highest traffic rate possible.
2. Difficulty rate – represents the user's effort in reaching a noticeable position in the chosen term's ranking. Users should aim for keywords with the lowest difficulty rate possible.
3. Competing apps – represents the number of apps competing for high ranking in regards to the chosen keyword. Users should aim for keywords with the lowest number of competing apps possible.

The strict character limit imposed by both Apple's App Store and Google Play, means that marketers and app developers must make extremely calculated decisions in determining which keywords to include in the app page content. The result of a proper ASO procedure will lead app marketers and developers into choosing keywords that are both extremely relevant, and provide high traffic rates at a reasonable level of difficulty and competition.



Objective & Methodology

The objective of the following study is to conduct a comprehensive comparison between different ASO tools. The data was sourced from 4 main keyword research tools that are available for free usage. We have chosen the most popular tools in the market (Sensor Tower, App Annie, MobileDevHQ), as well as a relatively intriguing newcomer (Mobile Action) and a web-based platform (Google Keyword Planner).

We set out to study the differences between these platforms in terms of available features as well as delivered results.

During the first stage of the research, we have conducted a systematic feature-scan and listed every available ASO parameter measured by each tool. We have chosen to focus solely on the free version of each ASO platform, with the intent of putting ourselves in the users' shoes, as we believe the majority of users are less likely to invest in a paid ASO plan.

For the core stage of the research, which consisted of a comprehensive comparison of the results provided by each tool, we have chosen five different apps, belonging to separate key Appstore categories, and tracked ten relevant keywords for each one. The test was conducted under USA localization on Apple's Appstore.

While most ASO platforms participated in each parameter test, App Annie was only included in the competitive analysis stage, as the platform does not allow users to track traffic or difficulty as part of its free version.

We have selected the following apps and keywords:

Category	App	Keywords
Games	Candy Crush	Game, Candy, Crash, Free game, Combination, Levels, Sweets, Saga, Top games, Candy game.
Music	Jango	Music, Free music, Playlist, Songs, Radio, Streaming, Music streamer, Music player, Radio player, Music radio.
Photography	Instagram	Photo, Filter, Video, Effects, Camera, Photo effects, Photoshare, Picture, Upload, Share.
News	CNN	Breaking news, Business news, News, Technology news, Reporter, News apps, Sports news, International news, News worldwide, Technology.
Weather	WeatherBug	Weather, Radar, Forecasts, Hurricane, Summer, Map, Storm, Rain, Alert, Winter.

In total, fifty keywords were tracked in every relevant tool. After gathering the results, we have normalized the figures and compared them to one another.



Features Comparison

Each ASO tool holds unique advantages and disadvantages, starting with the list of features offered to users who opt for the free online version. The following tables present a details report of each platform's available features, as well as practical recommendations:

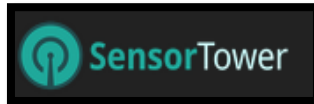


Traffic	N/A
Difficulty	N/A
Competing Apps	Users can view the number of competing apps.
Ranking	Users can view current ranking, as well as past ranking comparison.
Additional Info	<ul style="list-style-type: none"> ➤ The site provides first time users with an initial 30 relevant words bank. ➤ "Featured App"- a useful tool to gage app performance. ➤ "Store Intelligence" – provides download and revenue estimates aggregated by app, publisher, country, and category for all major stores.
Recommendation of use	We recommend using the keywords list provided by the site as a starting point for your research.



Traffic	Users can view the estimated traffic for each keyword, referred to as "volume", which is a comparison of the highest and lowest traffic.
Difficulty	Users can view the difficulty level for each keyword on a scale of 0-100.
Competing Apps	N/A
Ranking	Users can view current ranking, as well as past ranking comparison (percentage).

Additional Info	<ul style="list-style-type: none"> ➤ First time users receive an initial list of 30 keywords. ➤ Users can view every aspect of their app page: screenshots, app description etc. ➤ Users can see which category their keywords belong to.
Recommendation of use	We recommend using the site's phrase suggestion tool



Traffic	Traffic data is available for tracked keywords. The data is measured on a scale of 0 to 10. It is usually recommended to choose the key with the highest traffic and lowest difficulty.
Difficulty	Difficulty data is available and is measured on a scale of 0 to 10.
Competing Apps	Competitive analysis is available as well as a "keyword spy" feature to track competitors' keywords and discover relevant keywords.
Ranking	Users can view the app's ranking for each tracked term and can compare current rankings with previous ones.
Additional Info	<ul style="list-style-type: none"> ➤ First time users are met with suggested keywords. ➤ Users can view other parameters, such as screen shots and app description. ➤ Store intelligence – a web-based mobile analytics that provides downloads and revenue estimates for over 3M apps in Apple App Store and Google play.
Recommendation of use	We recommend using the difficulty estimation to understand which keywords are likely to rank high. The keyword research module allows us to see the search results as they appear in the chosen app store and country.



Traffic	Traffic data is available. The "search score" column presents the number of times each term was searched for on a scale of 0 to 100. A score of 40+ is considered relatively high.
Difficulty	Difficulty data is available. The "chance" column allows users to view the likelihood of ranking in the top 10 for


	each term, on a scale of 0-100. Unlike other difficulty scores, users should aim for the highest score possible.
Competing Apps	Competitive analysis is available.
Ranking	Users can view the app's ranking for tracked term and can compare current rankings with previous ones.
Additional Info	<ul style="list-style-type: none"> ▶ First time users are met with a list of suggested keywords, either from iTunes connect or based on the app's current ranking. ▶ Suggested keywords are highlighted for easy viewing. Orange represents words that are sources from iTunes and Green represents title keywords.
Recommendation of use	A very useful feature is the "statistics" tab, which allows users to get a full picture of their app. The feature includes: App long-term ranking and installs history. Users are advised to study the periods during which their product has reached the highest download volume and optimize it accordingly.



Traffic	The average monthly search data on Google search is available
Difficulty	Difficulty data is available for advertising on Adwords, which can predict the commercial intent around a certain keyword.
Competing Apps	N/A
Ranking	N/A
Additional Info	<ul style="list-style-type: none"> ▶ The data available is based on Google's search engine and not oriented towards the mobile app stores. ▶ Mobile trends are available which can shed light on seasonality of keywords. ▶ A powerful keyword suggestion tool can assist with discovering additional related keywords.
Recommendation of use	We recommend using this tool as additional support, but to rely on other tools for your main keyword research. Discovering mobile trends and additional keyword ideas should be the main use of this tool.



Features scan summary:

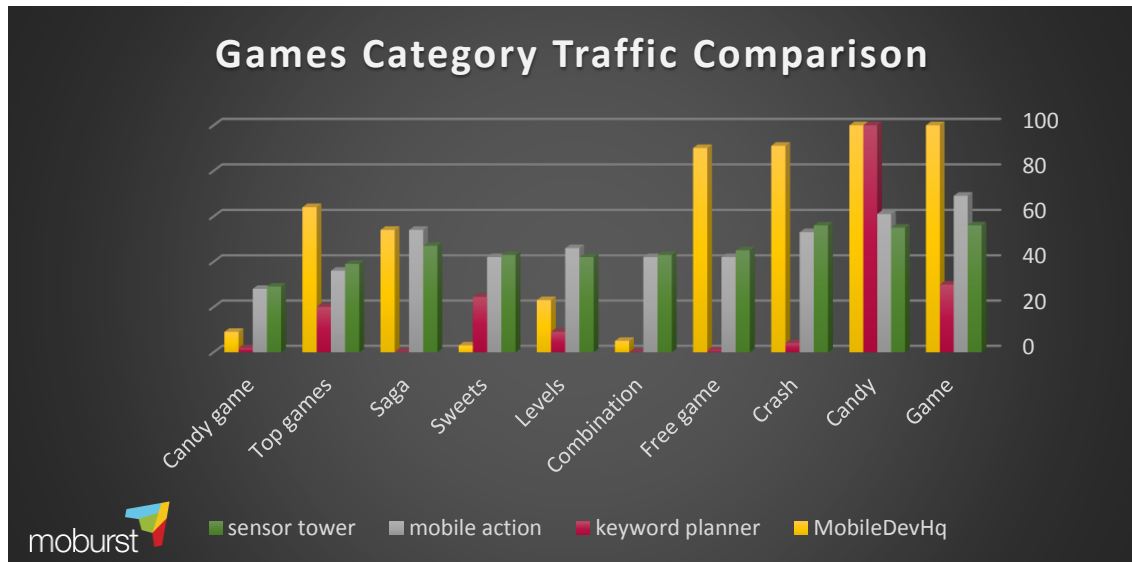
	Mobile Action	MobileDevHq	App Annie	Sensor Tower	Keyword Planner
Traffic	✓	✓	✗	✓	✓ ¹
Difficulty	✓	✓	✗	✓	✓ ²
Ranking	✓	✓	✓	✓	✗
Competitive Apps	✓	✗	✓	✓	✗

Not related to apps¹
Not related to apps²

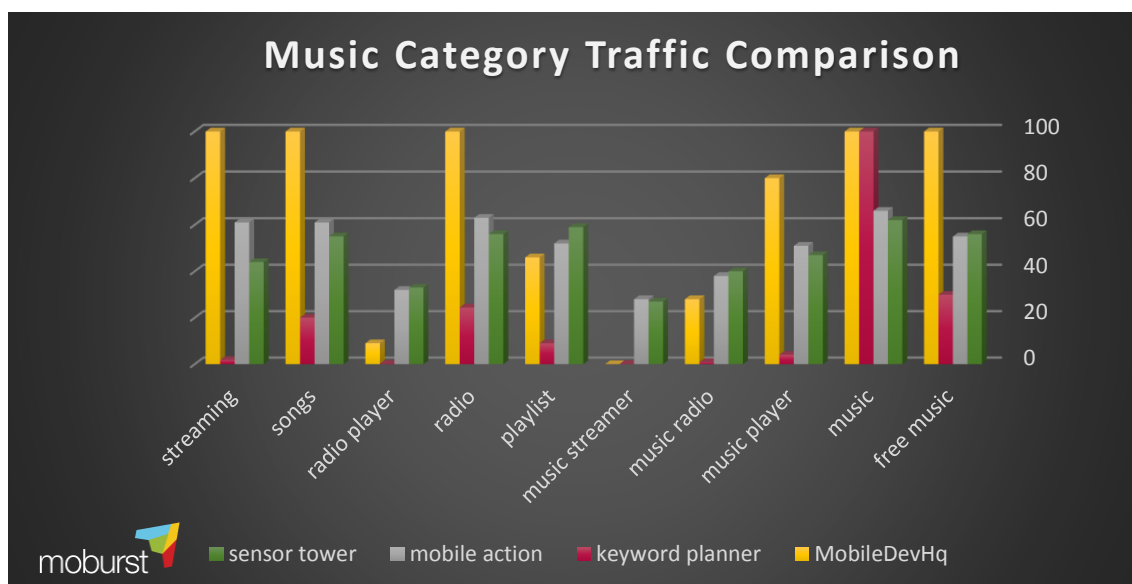


Traffic Comparison:

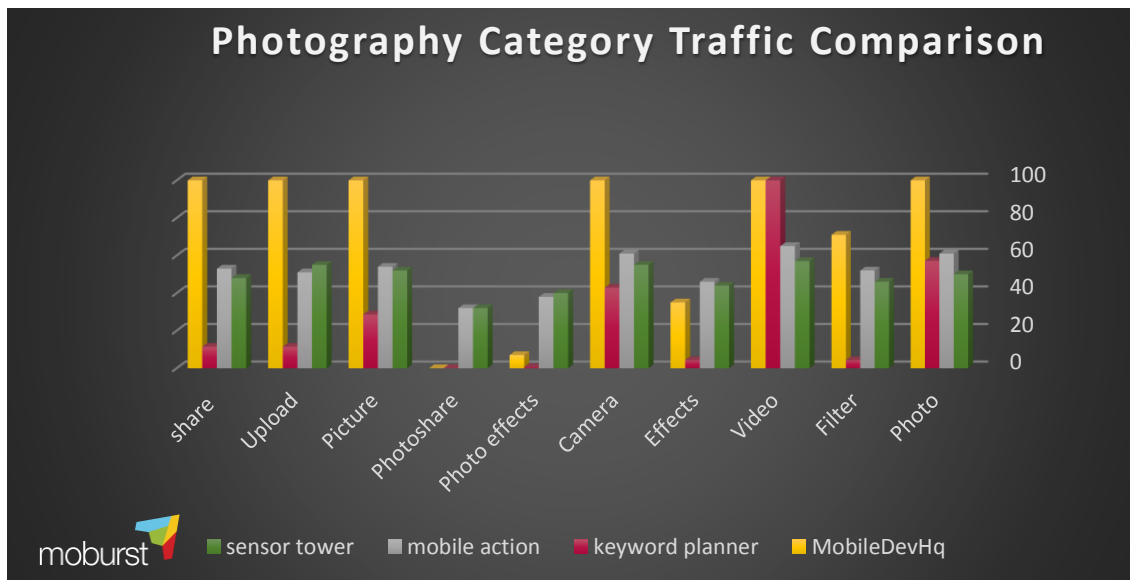
A high traffic rate suggests a more sought-after search term. Since the objective of ASO is to attract relevant users based on their search queries, traffic is one of the crucial ingredients users should measure in determining which terms to include.



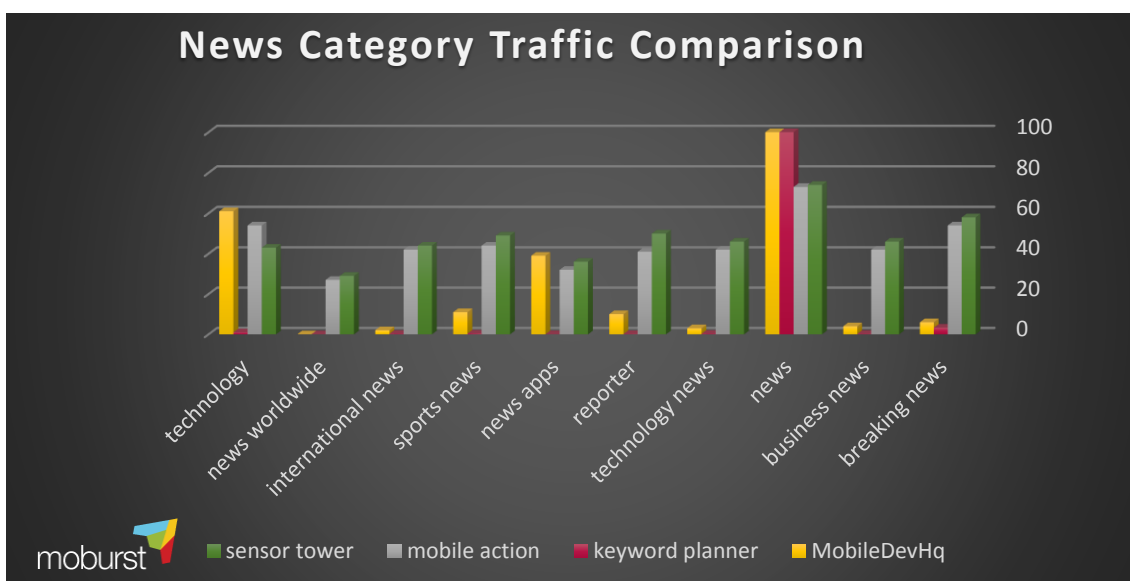
- In most cases, Sensor Tower and Mobile Action presented similar results.
- In all but one instance, MobileDevHQ presented fundamentally different data than other mobile-based platforms.
- For most terms, Keyword Planner presents drastically low results, which could stem from it being a web-based platform that is less exposed to app-related terms.



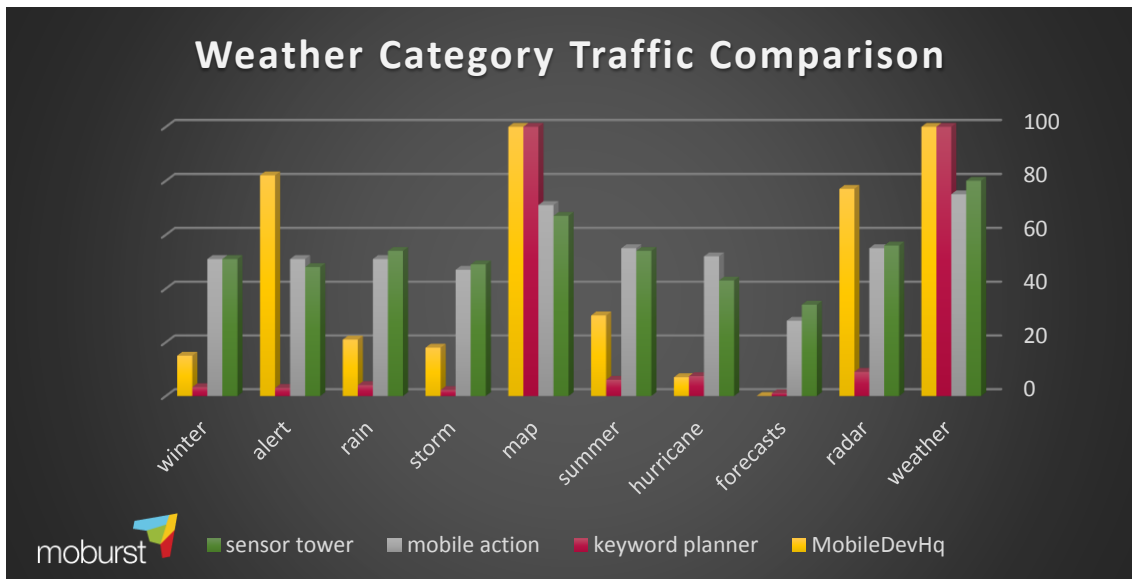
- Predictably, the term "music" proved to be very popular, and all platforms presented relatively high results. However, there is a significant difference between the traffic level measured on Sensor Tower and Mobile action on the one hand, and MobileDevHQ and Google's Keyword Planner on the other.
- At first glance, it seems that MobileDevHQ once again reached the highest scores. However, a closer look will reveal the exact opposite for 2 terms: radio player and music streamer.



- It is interesting to note that the term "picture" which one would assume to be a leading term, reached high results only on MobileDevHQ.
- Both Google's Keyword Planner and MobileDevHQ presented no data for the term "photoshare".



- ▶ Keyword Planner failed to provide any results for most keywords.
- ▶ MobileDevHQ Presented high results for only one term, and uncharacteristically low results for all other search terms.

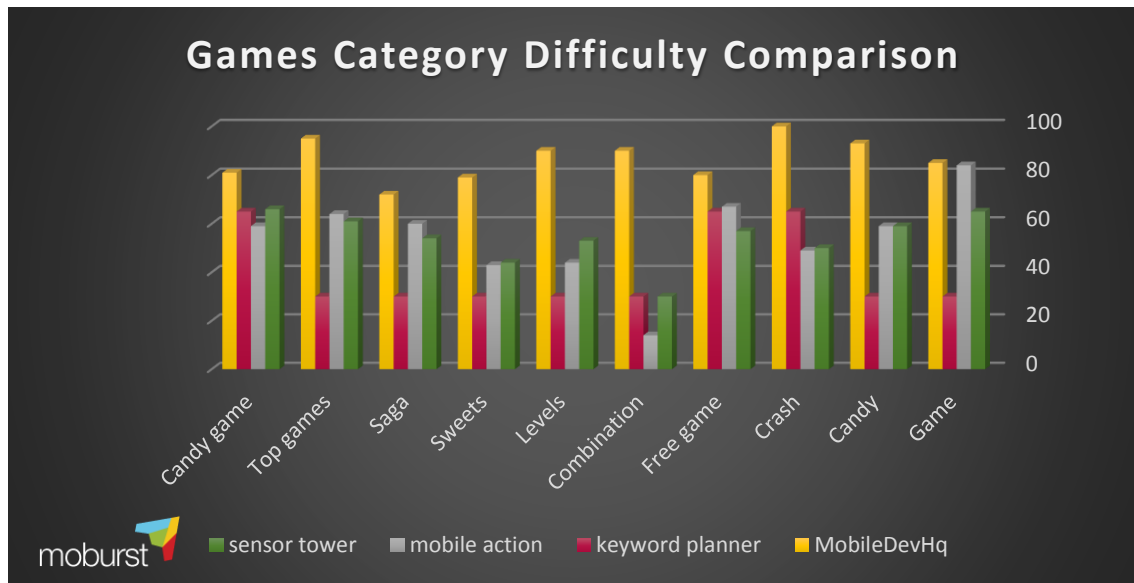


- ▶ Keyword Planner produced uncharacteristically high results for the terms "Map" and "Weather".
- ▶ MobileDevHQ was the only tool to produce no traffic for the term "forecasts".

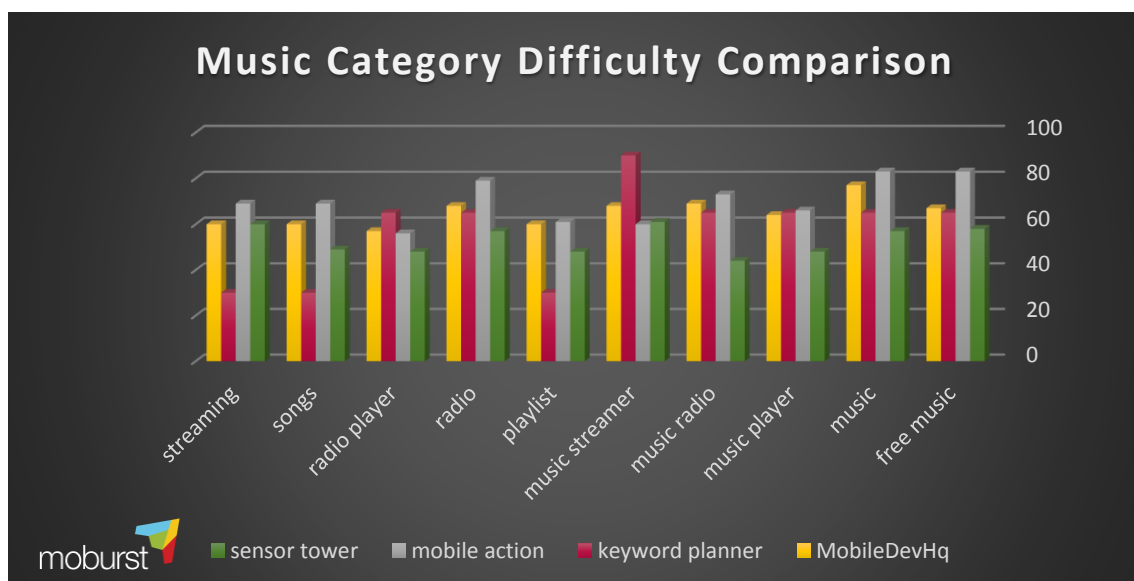


Difficulty Comparison

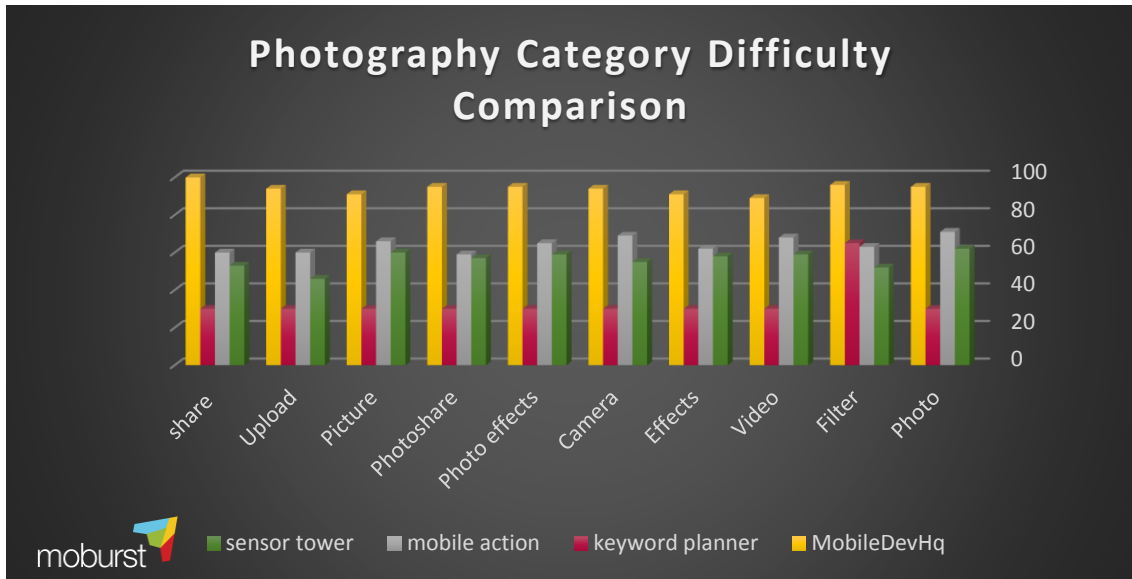
The app store is a competitive arena. Difficulty rates predict how difficult it is to achieve a leading position in ranking for a certain search term.



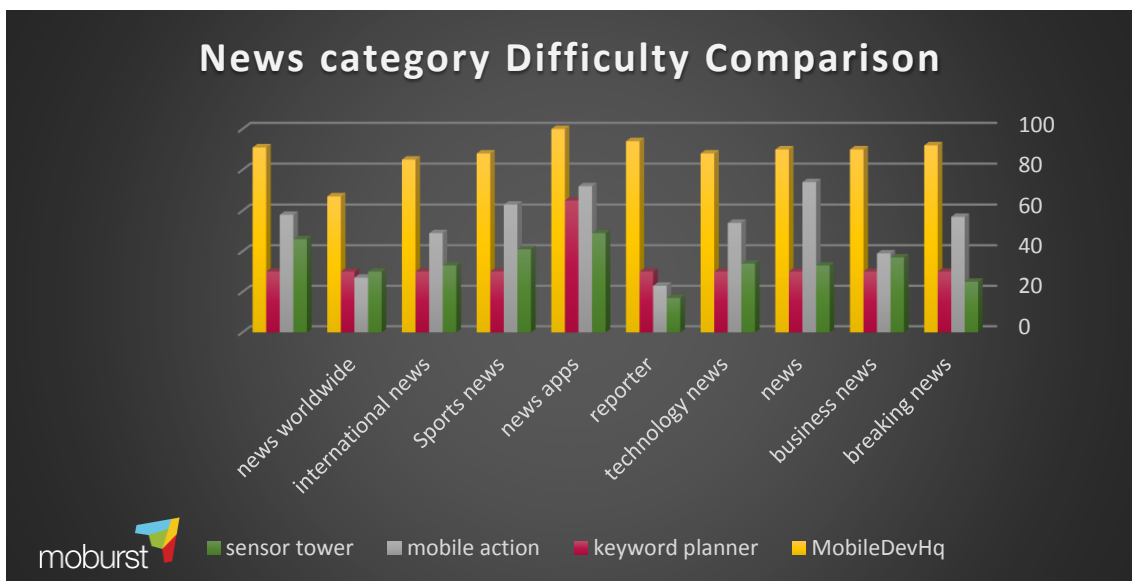
- Much like the data produced when measuring traffic levels, Mobile Action and Sensor Tower continue to provide similar results for the difficulty levels, while MobileDevHQ's results remains relatively high.
- While Google's Keyword Planner continues to produce low results in some cases, it produces very similar results these of Sensor Tower and Mobile Action for 2 of the terms measured: "Candy game" and "Free game".



- Sensor Tower, Mobile Action and MobileDevHQ produced medium-range scores for most search terms.
- Google's Keyword Planner produced the highest score for the term "music streamer" and the lowest scores for the terms: "streaming", "songs" and "playlist".
- Neither tool produces extremely low scores for any search term.

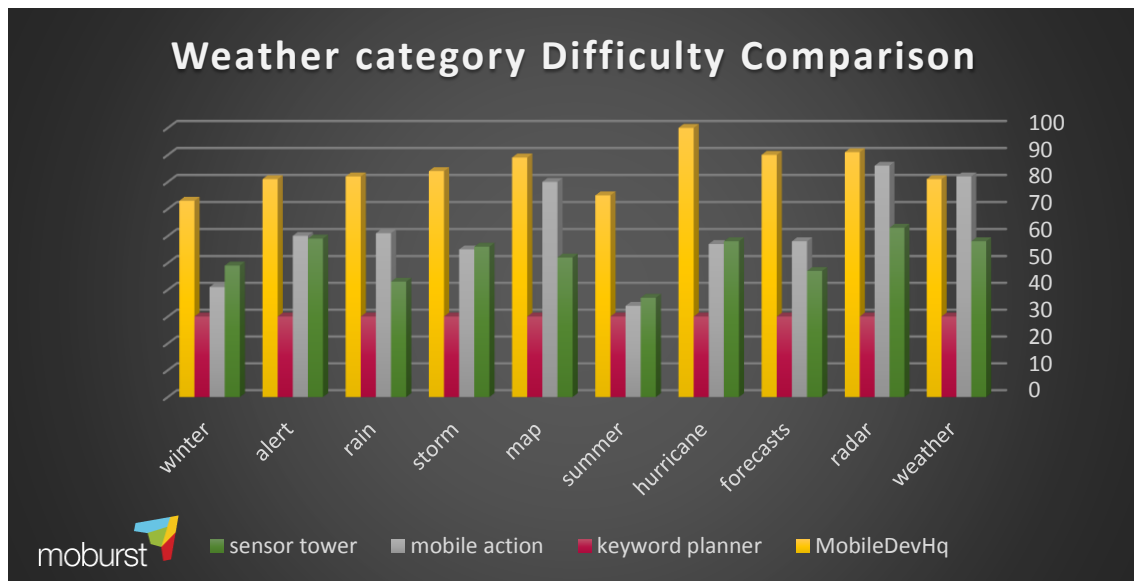


- Once again, MobileDevHQ displayed different results than other tools measures. This time the results are extremely high.
- For nearly every search term, Keyword Planner presented the same result: 30% (medium).



- MobileDevHQ produced the highest results for every term tested.
- The term "reporter" reached similar results of around 30% on 3 out of 4 tested tools. The only platform to produce a different outcome was MobileDevHQ, with 88%.

- Keyword planner showed high results for the term "news apps".



- Sensor Tower and Mobile Action Produced similar results for 3 terms. However, no two tools reached similar results consistently.
- The biggest gap was between MobileDevHQ and Keyword Planner, with the first regularly reaching the highest scores and the latter reaching the lowest in every case but one.



Competition Comparison

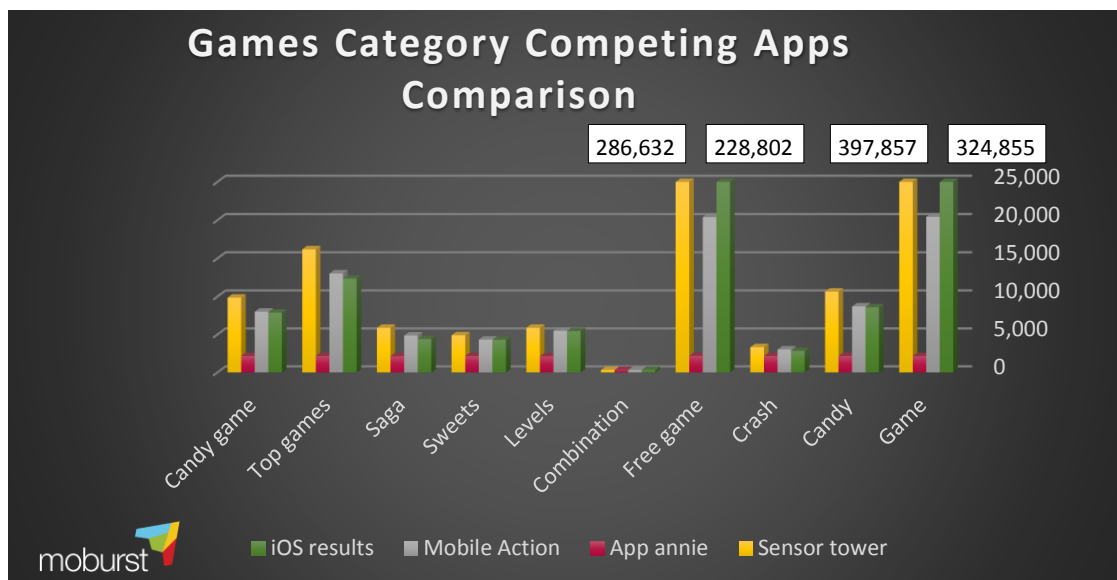
The comparison of competing app data was performed between Mobile Action, App Annie and Sensor Tower. That is due to the simple fact that Google's Keyword Planner is not a mobile-oriented tool and thus does not provide users with this information, MobileDevHQ does not include this feature.

We have conducted a comparative research between the different platforms, as well as in comparison with the iOS search results. Apple's Appstore numbers provide a reference point to the different results produced using each tool. The tool to produce results most similar to these of the Appstore search results was Sensor Tower.

The data sources from these platforms did not require data normalization, since all platforms claim to present the number of competing apps.

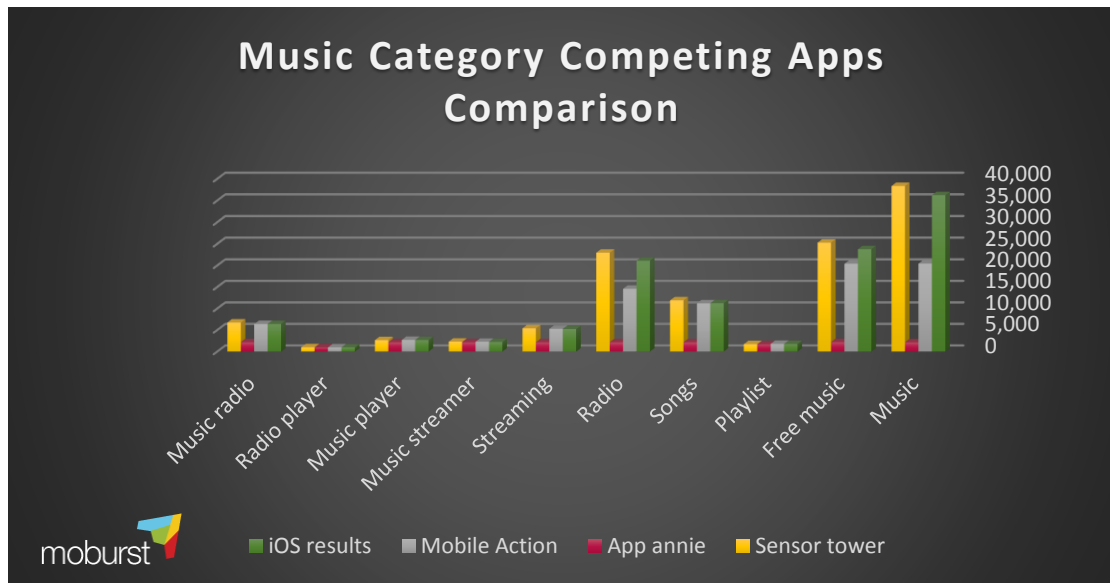
The results on each category were as follows:

- Sensor Tower produced the highest number of competing apps, a significantly higher result compared to other platforms. In many cases, Sensor Tower's results were even higher than those measured on Apple's Appstore (marked as iOS).
- Mobile Action and App Annie presented relatively low results, especially in comparison with the results measured on iOS. In most cases, the results didn't surpass 2.5k competing apps.

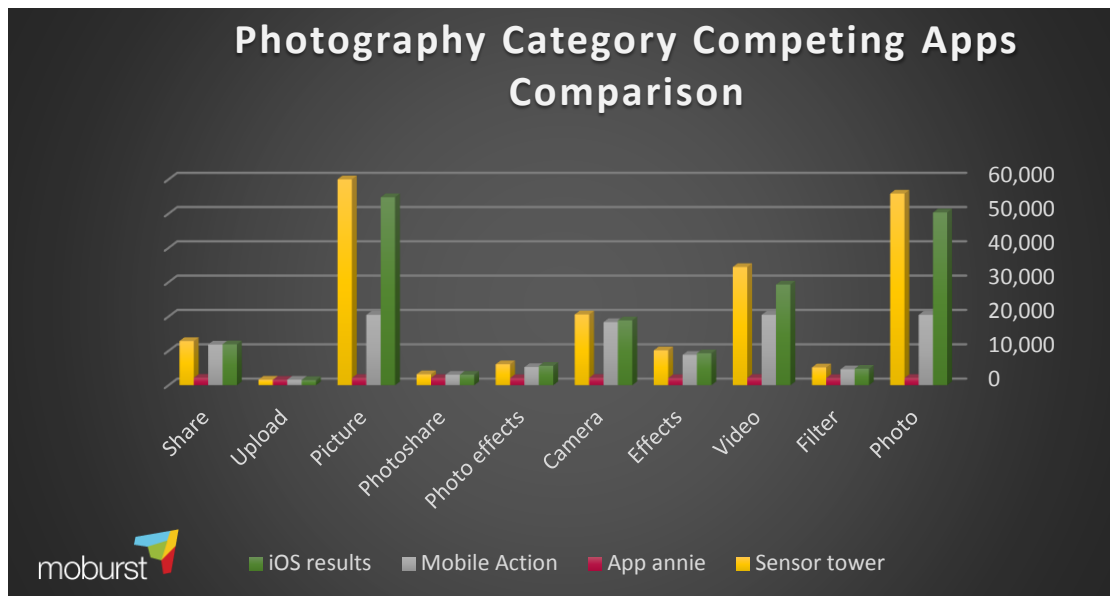


- Results were repeatedly inconsistent between the different platforms, aside from the term "Combination" for which both tools presented extremely low numbers.
- The term "Games" presented surprisingly low results when tested using App Annie's compared to the results measured on other platforms.

- Overall, App Annie produced the lowest results in this category.

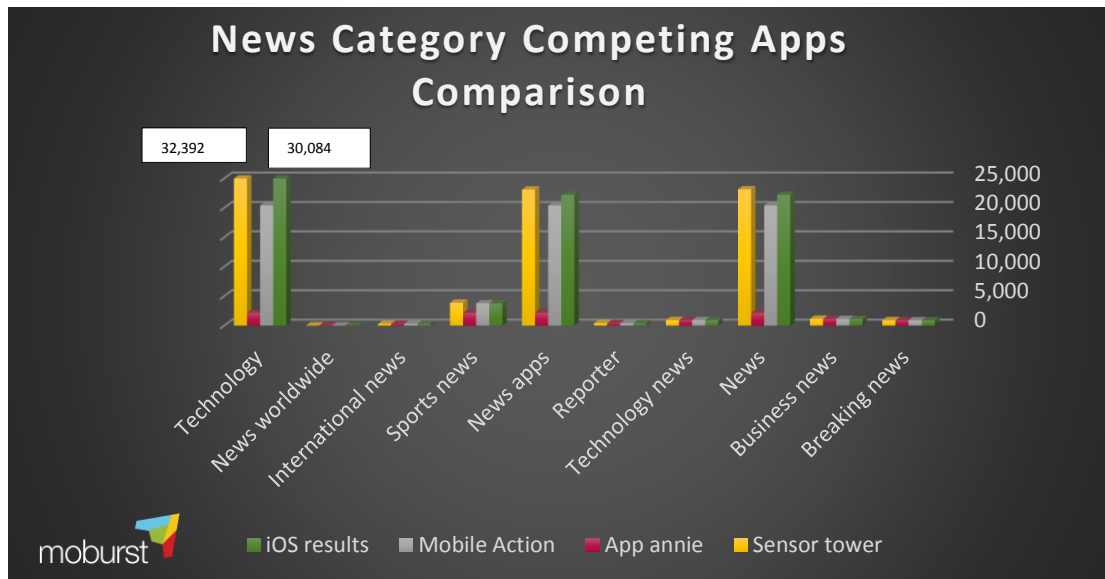


- Results in this category were extremely similar for 4 out of 10 terms.
- In other cases, the results were extremely different. For instance, the term "free music" reached 25,266 competing apps on Sensor tower, and merely 2,194 apps on App Annie. A staggering difference of 1051%!

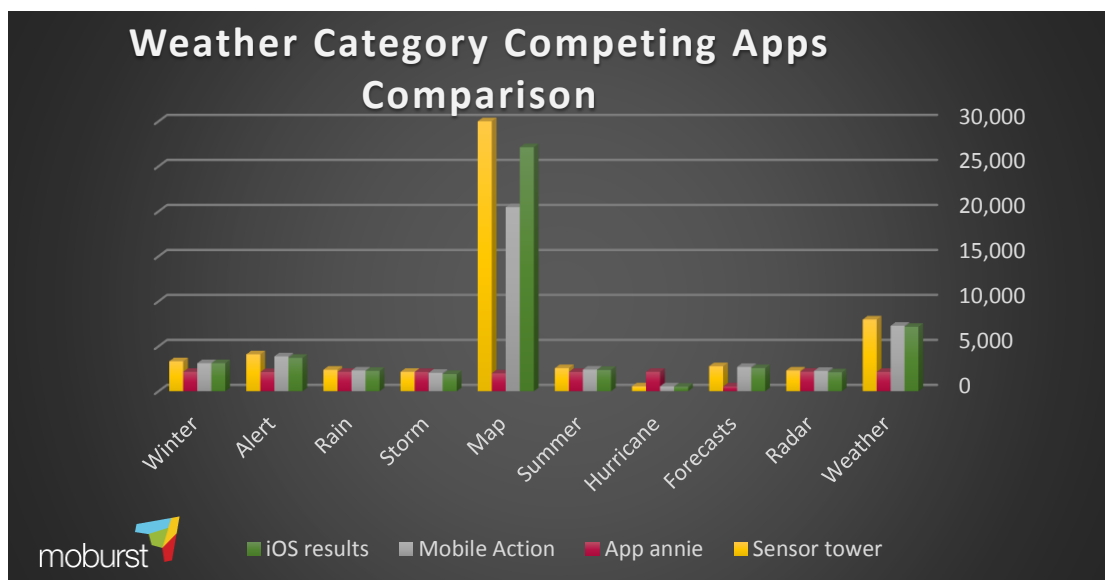


- Key terms such as "picture", "camera" and "photo" produces significantly low results when tested on App Annie.
- Results for the term "upload" were very similar: 1416 on Mobile Action, 1561 on App Annie, 1607 on sensor tower and 1475 on IOS.

- ▶ The term "photo" produced 50,322 competing apps on IOS, and only 2,129 apps on App Annie. An incredible 860% gap.



- ▶ The terms "news worldwide", "reporter" and "international news" reached extremely low results on all measured platforms.
- ▶ The terms "news", "news apps" and "technology " proved to be very popular on all tools except for App Annie.



- ▶ Aside from one term –"map" - no radically high results were reached on either platform.
- ▶ The following terms produced very similar results: rain, storm, summer, radar.
- ▶ The term "map" reached 30,364 competing apps on Sensor Tower and only 1981 apps on App Annie. More than 15 times higher results on App Annie.



Conclusions & Recommendations:

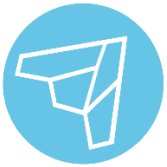
- The keyword selection process took into consideration the different factors tested throughout the research: We searched for the keywords that produced a sufficient traffic level and filtered them based on their difficulty and competition levels. Another key element was a specific term's relevancy, which will no doubt effect the discoverability rates.
- The following table represents the top 3 keywords that each ASO platform would have recommended for users to choose. Out of fifty tracked terms, only 3 words appeared on every tool's results: "video", "news" and "songs".

Tools Category	Sensor Tower	Mobile Action	Keyword Planner	MobileDevHq
Games	Combination Sweets Crash	Combination Sweets Crash	Game Sweets Candy	Free Game Game Candy
Music	Streaming Songs Playlist	Streaming Songs Playlist	Music Songs Free Music	Streaming Songs Free Music
Photography	Upload Camera Video	Share Camera Video	Photo Camera Video	Picture Upload Video
News	Reporter Breaking News News	News worldwide News Business News	News Technology Breaking News	News Technology News apps
Weather	Weather Summer Map	Storm Summer Winter	Weather Map Radar	Weather Alert Map

- ASO is a challenging task. For novice users, understanding the subtle balance between traffic volume and difficulty level could be a rather perplexing mission. While most platforms do make an effort to create a relatively user-friendly working environment, users must first understand the basics of ASO before attempting to perform keyword research independently.
- Each parameter measured (traffic, difficulty and competition) produces significantly different results on each tool. The overwhelming gap between these results suggests that one tool cannot provide users with a clear answer.

- Each tool presents different advantages and disadvantages, which further adds to the conclusion that one cannot rely solely on a single tool in order to perform an in depth analysis and reach accurate results.
- Not only are users unable to conduct their ASO keyword research using just one tool, the lack of clarity and incompatible values make it virtually impossible for unexperienced users to determine the right keywords based on the data gathered, even after conducting their research using numerous tools and combining their data.
- The issue of ASO know-how remains a prominent factor in completing a comprehensive keyword research. While many tools offer assistance in measuring potential keywords, users still face the challenge of discovering which words should be tracked in the first place. Some tools do offer initial keywords suggestions, but there is still no adequate solution to replace the expertise of ASO professionals.
- Since most available tools provide paid versions, the free version is meant to give users a solid foundation for their ASO work, while leaving enough data out of sight. Thus, the premium features included in the paid versions will no doubt influence users' decision in choosing a specific tool.
- We recommend combining App Annie's relatively broad keyword suggestions with MobileDevHQ and Sensor Tower's tracking tool. This should allow users to fill in some of the missing data fields for each tool and receive a broader picture.
- The massive difference between competition results provided by App Annie and Mobile Action could suggest a difference in versions, a completely separate measuring method or basic inaccuracy.
- On Google Play, users should take into account that chosen keywords should be implemented in the text.
- The process is very dynamic and must be revisited and optimized on a regular basis. We recommend conducting a weekly ranking examination and optimizing keyword selection and app description accordingly.

"Technology can help the qualified, well-trained human being, but cannot replace him" / Isaac Yeffet



About Us

Moburst is a full service, global mobile marketing agency that helps companies grow their mobile business. After redefining hundreds of apps and A/B testing every possible feature in every vertical, our team knows what works for each product, and how to deliver the most relevant experiences for each user. We love solving clients' tough mobile challenges and believe that the combination of creative thinking, advanced technology, and data drives success at scale.

Hundreds of companies, from local startups to large global brands such as: Microsoft, Gett, Pfizer, Sony Music and Nielsen Innovation, have leveraged our product refinement, app store optimization (ASO), user acquisition, and mobile consulting services to enhance their product and maximize their KPIs.

Every day, our team's mission is to innovate creative solutions that connect brands with highly targeted audiences that convert into loyal users.

Moburst has offices in New York City and Israel.

To learn more, visit www.moburst.com or contact us at hello@moburst.com.