




GAMING THE SYSTEM

Mastering MMM in Mobile Advertising Amidst Digital Challenges



Navigating the complex world of mobile gaming with Marketing Mix Modelling, understanding attribution's role, and tackling signal loss effectively.

Mobile gaming has experienced explosive growth in recent years, becoming a multi-billion dollar industry. With over 2.7 billion gamers worldwide, mobile games account for nearly half of the global gaming market*. In this highly competitive landscape, advertising plays a crucial role for game publishers, helping drive user acquisition, increase app visibility, and monetize games through IAP (in-app purchases) and IAA (In-App Advertising). As such, effective advertising strategies are vital for mobile game publishers to succeed.

Gaming companies thrive on agility and rely heavily on daily data to make crucial decisions regarding advertising and promotions. Central to their marketing strategy is the use of attribution models, particularly last-touch digital attribution, which provides daily tracking results to evaluate the performance of different advertising channels and plan future marketing spends. Additionally, the gaming industry is characterized by rapid developments and frequent updates to both their own SDKs and those of ad networks, in order to keep pace with changes in the advertising ecosystem. This dynamic environment heightens the necessity for dependable attribution systems to simplify tracking and decision-making,

* Source: Official Website of the International Trade Administration

Marketing Measurement Challenges for Mobile Gaming Companies

The heavy reliance on attribution has meant that game publishers also face critical challenges due to signal-loss in today's digital advertising landscape. This loss can be attributed to several factors, including GDPR and other data privacy regulations, and significant changes to Apple iOS, which replaced the IDFA system with a lower resolution attribution system called SKAdNetwork. Moreover, developments such as Apple's ATT and Google's Privacy Sandbox, coupled with media fragmentation, have further complicated accurate measurement in the advertising ecosystem.

These challenges manifest in various ways for BI Teams, user acquisition teams, and marketing teams:



Cross-Platform Tracking Limitations:

With cross-platform tracking not widely available, not all touchpoints in the user's purchase journey can be tracked and connected, leading to less accurate results.



Probabilistic Attribution Overestimation:

Statistical models and machine learning used in probabilistic attribution tend to overestimate the impact of some small channels.

Current Industry Practices to Address Challenges

Game titles with budget constraints often rely solely on last-touch attribution to optimize marketing expenditures. However, last-touch attribution typically assigns disproportionately higher credit to click heavy channels while underestimating the impact of impression-based channels that primarily establish awareness and preference. This reliance on last-touch data often results in over-investments on click heavy channels at the expense of impression based awareness generating channels.

In-market testing (test vs. control) is also frequently used to measure the relative effectiveness of different channels. While this method can deliver valuable insights, it comes with its own set of limitations and often requires temporary adjustments or even short-term pauses in marketing channel expenditures for testing purposes.



Possible Solutions Using Marketing Mix Modelling (MMM)



Testing and Validating accuracy of MMM: Marketing Mix Modelling (MMM) can measure KPIs like Cost Per Installation (CPI) and Return on Advertising Spend (RoAS). Holdout testing should be used to evaluate the prediction accuracy of MMM, providing higher confidence in the model.



Enhancing Media Mix Planning through MMM Calibration: Utilizing Marketing Mix Modelling (MMM) as a calibration tool alongside last-touch attribution offers valuable insights into the consistency and discrepancies between these methodologies. By identifying a consistent variance between MMM outcomes and last-touch results, game publishers can leverage these insights to guide their day-to-day media operations.

This process helps in adjusting the media mix to better allocate marketing spend, enhancing overall campaign effectiveness and optimizing return on investment. Such strategic calibration ensures that both high-level and granular marketing decisions are data-driven and aligned with broader business objectives.

The resurgence of open-source packages offers an alternative solution for analysts who prefer a hands-on approach, enhancing their ability to adapt and innovate within MMM frameworks.



Insights and Recommendations from Analytic Edge

Analytic Edge has collaborated with multiple gaming clients to address challenges related to signal loss in digital advertising:

MMM Accuracy Validation

Through extensive testing with various clients, Analytic Edge detected a 3-10% future prediction error rate in key performance indicators such as Installs and Dn Revenue Models across scenarios that include both In-App-Advertising (IAA) and In-App-Purchase (IAP) games. This finding underscores the need for continuous refinement in modeling techniques.

Gap Analysis between MMM and Attribution

By analyzing the discrepancies between Marketing Mix Modelling (MMM) and attribution methodologies, Analytic Edge has helped clients gauge the effectiveness of upper-funnel channels and optimize the interplay between upper and lower funnel strategies to maximize ROAS.

Recommendations for Strategic Alignment

- **Lower-Funnel Optimization:** Prioritize investment in lower-funnel channels, which are crucial at the final conversion points. Employ saturation analysis to determine the point at which additional spending yields no further gains, ensuring optimal allocation of resources.
- **Upper and Lower Funnel Synergy:** Strengthen the relationship between upper funnel channels, which enhance brand awareness, and lower funnel touchpoints, which drive conversions. This approach helps expand the potential user base over time, contributing to long-term brand growth.
- **Dynamic Refresh of MMM Models:** Update MMM models weekly to reflect the latest market conditions and integrate these insights with daily attribution data to facilitate agile decision-making and timely campaign adjustments.

Conclusion

In conclusion, mobile game publishers face significant challenges in marketing measurement due to signal loss in the digital advertising landscape. By adopting practices like Marketing Mix Modelling and leveraging insights and expertise from companies such as Analytic Edge, publishers can overcome these challenges and make more informed decisions about their marketing strategies, ultimately leading to improved ROI and sustainable growth in the competitive digital marketplace.



About Analytic Edge

Analytic Edge is a global analytics company that leverages technology and advanced analytics to help companies make data-based marketing decisions. The company's flagship platform Analytic Edge Qube offers a suite of marketing analytics solutions with a Software as a Service (SaaS) model. The solutions include DemandDrivers™ for always-on Marketing Mix Modeling (MMM), SynTest™ for AI powered Test and Learn, PriceSense™ for pricing and promotion analytics, and PowerView™ for analytics visualization. Analytic Edge works with clients across industry verticals such as e-commerce, mobile apps, gaming, consumer packaged goods, retail, automotive and many others. The company has offices in Singapore, India, US, Canada, Mexico, Brazil, UK, Switzerland, China, Japan, South Korea, UAE and Australia.

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