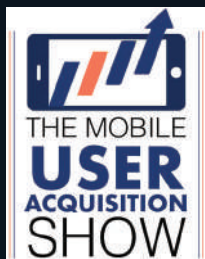


# THE MOBILE GROWTH HANDBOOK 2022

Featuring insights from the  
Mobile User Acquisition Show



**ROCKETSHIP HQ**  
Growth. Accelerated.

2021 was a year of disruption across the mobile growth industry with Apple's Privacy Policy changes. While we're all figuring out our way through, it's safe to say that mobile growth professionals across the world have pulled closer into a tight network to share their learnings and strategies, to ride these stormy waters out together. .

We have had some spectacular guests this year on the Mobile User Acquisition show, who have pulled back the curtain on how they work, unveiled their strategies, and given us data backed learnings. Although most of our conversations have revolved around mobile growth, we have also talked about team dynamics, culture and how we work - given that the pandemic changed the way most of the world "went to work".

In this book, we have included insights extracted from the best episodes of the Mobile User Acquisition show. We were inspired by the warm reception and great feedback you gave us for the 2021 edition of the Mobile Growth Handbook to put together an updated version for you.

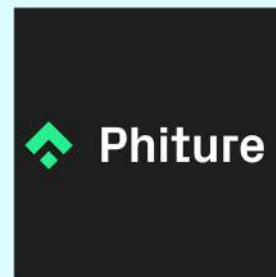
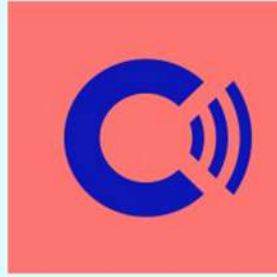
These insights will give you actionable steps to understand and thrive in all aspects of mobile growth in 2022. If you're facing a question or challenge, chances are that some of our guests have too - and have spoken about how they've solved for it.

We hope this handbook will help you with your growth plans for 2022 and equip you with all that you need to scale your product in a post identifier world.

We've organized this book into sections pertaining to the different areas of mobile growth, so you can dip in and out of it. Treat this like a buffet in which you can choose what to read depending on what you're working on and what's pressing for you right now.

Bon appetit.

“The giants on whose shoulders we stand.  
Huge huge thanks to our guests and their companies,  
without whom this book would not be possible.”



# Table of Contents

Tap on a title to navigate directly to that page

## APP STORE OPTIMIZATION

- 1 iOS 15: AB testing (finally) arrives on iTunes with Product Page Optimization – what's possible (and what isn't)
- 3 App Store Optimization is not a strategy for scaling growth
- 4 iOS 15: How custom product pages \*could\* dramatically impact UA strategy (with examples)

## CREATIVE

- 6 How to break out of a creative rut by resetting your processes – with Danika Wilkinson, Product Marketing Manager at Social Point
- 9 Why more is more: how to use words to shatter the short attention span myth – with Stevie Lutgen, Senior Manager UA at Radish Fiction

## GROWTH ENGINEERING

- 11 How to apply Media Mix Modelling based solutions to mobile apps-with Brian Krebs, CEO at MetricWorks
- 14 How to build a bidding decision engine to future-proof your user acquisition activity-with Jayne Peressini, VP Growth at Dapper Labs

- 17 Is your CAC 10x of what your platform reports? How to surface incrementality issues in your paid UA-with Adam Lovallo, CEO and founder of Thesis

## HIRING LEADERSHIP AND GROWTH TEAMS

- 19 Zero to launch: how to (actually) build a casual gaming studio from scratch-with Sophie Vo, Studio & Game Lead at Voodoo
- 23 The opportunities and challenges of moving in-person teams remote and back again – with Seth Berman, Senior Director, Performance Marketing at Adobe
- 25 The zero meeting workplace – with Brett Nowak, Founder at Liquid and Grit

## MONETIZATION

- 28 How hybrid games combine the simplicity of hypercasual and depth of casual games – with Jon Hook, CEO at BoomHits
- 31 How to find the balance between monetization and retention – a mini-case study
- 33 Why your LTV might differ from your analyst's LTV

## iOS STRATEGY

- 36 State of iOS UA: Stats, Trends, and Strategies: our webinar with Singular, Liftoff & Adcolony
- 38 iOS 15: No more self-attributing networks (SANs): how SKAdNetwork will allow more objective campaign measurement soon
- 40 The state of Google Ads UAC post ATT/iOS 14.5: 8 big changes & challenges
- 43 The state of Facebook Ads post iOS 14.5/ATT: 4 challenges & 4 opportunities
- 45 How will lookalikes and post-install event optimization work under ATT & SKAdNetwork?
- 47 The power of attribution modeling to calculate LTVs in a post-IDFA world – with Chris Farm, Co-founder and CEO at Tenjin
- 49 A day in the life of an SKAdNetwork bid – with David Philippson, CEO and founder of Dataseat
- 52 Whatever happened to iOS 14 app clips? What Apple could have learned from playable ads.
- 54 More than just conversion values: how to make the most of your SKAdNetwork data – with Paul Bowen, GM at AlgoLift by Vungle
- 56 The curious case of Facebook's 128 install recommendation: how to address SKAdNetwork's privacy threshold limitations

- 58 What's working now post ATT/iOS 14.5 in mobile user acquisition: 6 opportunities to address performance deterioration
- 61 How to make compound/synthetic conversion value schemas work in SKAdNetwork

## STRATEGY

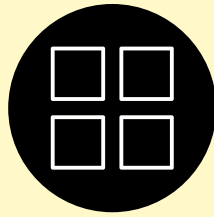
- 63 How to use structured TGIFs to build a 100 million download game from scratch – with Sheetal Bairamadgi, Founder at Crikey Games
- 65 The anatomy of a breakout launch: learnings from Project Makeover – with Jerome Turnbull, VP of Growth at AppLovin
- 67 How to build a hit developer-facing product – with Aurora Klæboe Berg, COO at Medal TV
- 70 Zero to category-leading: how habit formation can fast-forward subscription growth in an uncharted genre – with Govind Balakrishnan, CEO and Co-Founder of Curio Labs
- 73 Playing in style: how gaming & fashion are becoming increasingly intertwined – with Joanna frota Kurkowska, Digital Insights Analyst at G2A.com
- 75 How to win with offline marketing for a mobile app – with Adam Hadi, VP of Marketing at Current

- 77 How web privacy changes and tracking prevention are shaping the future of web advertising – with Allison Schiff, Senior Editor at AdExchanger
- 79 How PuzzleSocial Grew UA Spend From Zero to \$1.5 Million per Month(and got acquired by Zynga)
- 81 4 challenges of MMM based incrementality models and how to mitigate them
- 83 How monetization barriers can improve retention
- 84 How to build lasting partnerships with iTunes and Google Play app stores – with Jayvian Hong Head of Strategic Partnerships, Miniclip
- 86 The Mobile Growth Crystal Ball 2022: Predictions Part 1: Creative Automation(Danika Wilkinson, SocialPoint); Subscription Optimization(Andy Carvell, Phiture); an iOS Scandal(John Koetsier, Forbes)
- 88 The Mobile Growth Crystal Ball 2022: Predictions Part 2: Homecoming of the creative process (Melissa Zeloof, ironSource); Newer UA sources in the gang (Natalia Drozd, Fabulous); Alternate payment methods (Jerome Turnbull, AppLovin)
- 90 The Mobile Growth Crystal Ball 2022: Predictions Part 3: Retention marketing(Peggy Anne Salz, Mobile Groove); Play-to-earn gaming models (Keith Kawahata, AppLovin); Cross Promotions (Cameron Thom, Adikteev); Self-published games (Jon Hook, BoomHits)



## UA CHANNELS

- 92** How to win with Apple Search Ads in a post-ATT world  
– with Thomas Petit, Growth Consultant
- 94** Much-awaited changes to Facebook's Automated App Ads (AAA) campaigns: audience exclusion, age targeting, city targeting
- 96** How native ad flows with landing pages articles win out over direct to app store flows – with Violeta Pirnog, Senior Performance Marketing Manager at Blinkist
- 98** How to scale non-gaming audiences for games via influencers  
– with Nahir Garcia, Influencer Director at Etermax & Adsmood.com
- 100** Why you shouldn't diversify your user acquisition mix early on
- 102** How to break up with Facebook: the opportunities and challenges of an unusual acquisition channel mix – with Trang Dao, VP of Growth at Atom Finance
- 104** How to win with Facebook AAA (Automated App Ads) campaigns  
– with Gina Kwong, Senior UA Manager at Electronic Arts (EA)



# **APP STORE OPTIMIZATION**

## iOS 15: AB testing (finally) arrives on iTunes with Product Page Optimization – what's possible (and what isn't)



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

One of the big announcements at Apple's WWDC this year was that A/B testing is 'finally' going to be on the app stores.

For years, we'd had to use indirect ways to run these tests. Most often, we used the Google Play Dev Console experiments to get results that we'd use on iTunes – which was always a risk considering the kinds of users on those platforms are very different.

Some larger advertisers we work with had used what we've described as 'fake app store pages' to run A/B tests on iTunes, which again was risky given that the fake pages were, well, fake and it wasn't clear if Apple frowned on these. Plus of course UA platforms such as Facebook would send different kinds of traffic to a fake web page as compared to a real app store, so it was never clear if these approaches were reliable.

With iOS 15 though, this is all set to change – with what Apple calls Product Page Optimization.

While the UI and specific implementation is still not announced, Product Page Optimization will live within iTunes – and you will be able to test icons, screenshots and app previews (which are preview videos) within iTunes.

You can test up to 3 variants of each of these elements, so that does allow you significant numbers of variables to test. Plus: you can run separate tests in different geos – so you could be running multiple tests across geos.

What isn't yet clear is as to what the visualization of results will look like – but whatever it will be, it will be a step forward from right now.

While this is a big step, there are definitely limitations to what's going to be available.

a. You do need to submit your app for review – every test asset needs to be approved by Apple – so it isn't quite going to be 'plug and play' like Google Play is.

b. You still cannot AB test the app name, subtitle or description. The name and subtitle in particular can be very critical levers to conversion – and there seems to be no way to evaluate these just now.

c. You can't segment your results by sources of traffic – not even new or returning users; so your overall results will be somewhat high level.

With all this said, the coming changes are a huge step forward after what seemed like years of inertia – and we're excited to see movement and progress on this front.

## App Store Optimization is not a strategy for scaling growth



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

When we take on ASO related work, one of the things we have to do is set and manage expectations – primarily we have to communicate that ASO is not a source of crazy organic growth, and that it is very very hard to unlock scale with.

A lot of these conversations happen with folks who have worked on the web. Surely the same principles would apply to ASO? Surely you could unlock organic growth in a similar manner here?

Here is the main challenge with this line of thinking. Google search drives significant long tail searches – and non-brand searches – because Google is where you go to solve problems and ask 'how to' questions.

This is because Google provides content and information, which you can optimize for via content marketing and link building.

In contrast, the app store provides not content or info, but software.

That typically means the volume of searches on app stores is far far lower. And what search volume there is is to a great extent branded – because a lot of people know what they are looking for. All of this means there is a cap to the growth you can unlock via ASO.

This is not to say keyword optimization via ASO is useless. It has benefits – but there is a ceiling to the growth you can unlock with keyword optimization.

For all these reasons, we treat ASO as a set-it-and-forget-it strategy(which we occasionally revisit if there are significant seasonal or long term changes) – but don't do too much ongoing maintenance on.

## ★ iOS 15: How custom product pages \*could\* dramatically impact UA strategy (with examples) 🏐



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

Among the big changes that are coming with iOS 15 are custom product pages – which offer the ability to customize app store pages for different audiences.

Note that this is very different from product page optimization (or app store AB testing), which is also going to be offered within iTunes starting iOS 15, which we might talk about in a different episode.

What are custom product pages?

You can set up up to 35 different app store pages in iTunes. Each app store page can have different screenshots, promotional texts and app previews.

What is cool is that each of these is going to be targetable by a different custom URL, which you can use for different sources of traffic – which in some ways is reminiscent of tracker URLs of MMPs (except of course that unlike tracker URLs, you are sending users to different landing pages). What's also cool is that you can send traffic from customized ad creatives for separate audiences to each landing page.

What might be some of the use cases of these custom app store pages? You could pair, for instance:

1. If you're operating in multiple cities, you could send users from New York and Boston to different city-specific pages. Ad campaigns for New York send users to New York themed ads, and go to the New York page – ad campaigns for Boston send users to the Boston page.
  2. You could promote different services, products or genres in different custom pages. For instance, if your fiction app has romance stories and thrillers, you could highlight both via different custom product pages (and have ads for romance stories and thrillers lead to these separately).
- battlers.

3. You could also target different types of user personas via different app store pages. For instance, a strategy game that has 2 personas – builders and battlers could have custom landing pages for each persona. An ad that highlights buildings can lead to a landing page for builders, an ad that emphasizes fighting/battling can lead to a landing page for battlers.

4. You could target different demographic profiles via different custom product pages. For instance, you could have separate landing pages for men vs. women, or for younger vs. older users (if say you're a fitness app – or a dating app).

The privacy threshold is already being a problem for many folks we work with on iOS 14.5+ – and it's unclear as to how the reporting and privacy thresholds will work out if you have 35 custom product pages, and you're sending a trickle of traffic to each of these.

With that caveat though, the custom product pages are definitely a big step forward – and we're definitely excited to explore the possibilities that unfold with it.

All of these possibilities are exciting – however the only question mark that remains is around how Apple might use the privacy threshold for conversion values in these cases. Apple's documentation does say that you can:

- Monitor the success of each custom product page by viewing impressions, downloads, conversion rate, and more in App Analytics.
- Measure retention data and average proceeds per paying user for each custom product page, so you can see how it performs over time.

This isn't still 100% clear around whether you'll see aggregated data that is accurate and not obfuscated by privacy thresholds. For instance, if you run a campaign to a custom product page for New York – it becomes easier for you to separate out all New York users as a cohort and track their performance, which can be helpful for marketers, but seems to go against the grain of everything the privacy threshold is designed for.



**CREATIVE**



## How to break out of a creative rut by resetting your processes – with Danika Wilkinson, Product Marketing Manager, Social Point



Danika Wilkinson  
Product Marketer, Social Point

[Check out the entire episode](#)

## How to recognize the right time to revisit your processes

This creative winner we had was born out of pure luck. Continuing to do the same thing over and over again, wasn't going to find us a new winner. It was evident that after a year, nothing was coming out of this process. So we realized that it was time to really take a step back, look at what was going on, and totally revitalize everything that we were doing.

## Let the data tell you what to do

We had absolutely no shortage of ideas with the previous system. Our art team was always responsible for coming up with the creative briefs. Quite often, we would find that our decisions to either approve or disapprove certain creative ideas, were born out of pure intuition, or maybe a vague idea around what we thought looks good, or what we thought our audience would respond well to. In the new framework, we decided to set a list of guidelines to justify the production of a creative, and we had a very low threshold for what we called wild card creatives, which is to say, totally original creatives. These categories included things like market insights, audience Insights and what we see our competitors doing. Most importantly, the hard learnings that we have from our own internal testing and also our own internal live campaigns.

## The new framework that ran on autopilot at Social Point

Our testing process previously was very ad hoc. We'd just test things when we received them, and send back the results when they were ready. One of the core parts of our framework was making sure that there was a really strong synergy between testing, ideation and production. The easiest way to do this, and it sounds very simple, is to put together a very fixed roadmap of when things need to be delivered, when things have to be tested, when the results are to be communicated and analyzed, and then when the decisions are to be made about what is to be produced next. So it was as simple as just picking the days of the week and the time of the day, when our artists had to deliver assets and when they should expect to get results about those assets back.

## Educating the creative team to understand data is beneficial

We did a three or four part training session for the creative team where we really looked at the different metrics and what they mean and basically helped them to understand that creatives are at the core of our strategy, especially with a game. It helped them to understand how important their role actually is. Perhaps beforehand, they felt like they were just churning out assets without any idea of where they went or what impact they had, so it was really about empowering them. And not only to seek the data, to analyze the data and understand it, but also to feel that they are making the biggest impact on the entire marketing team on the success and profitability of the game.

## A CPI centric approach is better than an IPM centric approach

We find that going after the lowest CPI tends to be much more sustainable and much more profitable. So we focus much more heavily now on what creative is achieving us the lowest CPI as opposed to what is getting us the highest IPM. Network testing has a difference because obviously, it's not an auto bid. Then you need to be focused a bit more on IPM and CPM. We also look at impression and investment share, basically we look at where the algorithm is sending all the impressions to, because that usually is the best indicator that that creative is the most in line with whatever goal you've set up with the algorithm. But of course we do backup checks. We look at retention, LTV and of course ROI on our side, just to verify that.

## Why an extra level of testing can sustain profitability

In order to protect ourselves from disrupting live campaigns based purely on split testing results, we added another level of testing where by anything that beats our control is moved into a secondary quality testing phase, where we then double check retention LTV, so that way we can be extra sure that if we add a new concept into a live campaign, it's not going to tank our metrics.

## Even a poor creative offers learnings

What if something passes that initial test, it gets a lower CPI than the control, we move it into quality testing and the retention or the LTV is poor. We've got a learning to say okay, something about this creative makes people convert and want to download the game. But what is it that has not been in line with the game that they get? And how can we adapt accordingly?

## How company culture influences major revamps

We have this culture that we call being T shaped, which essentially means that you can be an expert in your field, but you're expected to branch out like the letter T into other fields as well. So nobody is confined into a box. In fact, it's expected of us to be able to do other things outside of our traditional area of expertise. We're very wary of having silos between teams as well. And this is kind of like a logic that we apply not only to say, in this case, UA and creative collaboration, but also, for example, marketing and product collaborations.

## A great team makes a great workplace

I would say the second thing is that I'm very fortunate to have a team who are extremely self reflective and self critical. And they were able to take a step back and say, okay, after a year, we've been working so hard, we've been coming up with all these original creative concepts, and nothing has worked. Something needs to change here.

## Creative diversity keeps your profitability afloat

The best thing about having so much creative diversity is that you have backups, so you're not just depending on one big winner and the second that runs out, you lose all of the scale, you lose all the profitability.

## **Why more is more: how to use words to shatter the short attention span myth – Stevie Lutgen, Senior Manager UA at Radish Fiction**



Stevie Duffin-Lutgen, Sr. Manager UA,  
Radish Fiction

[Check out the entire episode](#)

## Framing is everything

We've just been discovering over time that telling people, "Oh, hey, download Radish, it's great, here are the reasons why" hasn't been enough. In fact, we discovered that the more words we put in front of people, the better return on ad spend we were getting.

## Data tells a story that you shouldn't ignore

We thought, "Let's put in the first few chapters of our stories and see if that would get people interested and invested enough to hop into the app ultimately and continue along that same trajectory." It varied by story, but that had pretty astronomical results for ROAS and that's what kept leading us down that road – the data was there.

## Understanding human behavior to identify archetypes that resonate

We're all drawn to the same kind of tropes, characters, themes, motifs, over and over again, whether we realize it, like it or not.

## Research Netflix for work

It's not unusual for somebody to say, "Oh hey, as part of my day today during stand up, I'm going to watch this documentary," or "I'm going to watch this new romance that came out on Netflix."

## Find what works and translate it across multiple ad types

We had tried so many types of videos, where we certainly harped on the features of the app- interactions with authors, interactions with the community, choosing from many romance stories- that sort of messaging. And it has really paled in comparison to putting the stories front and center, as usual.

## Refine your offering

The offering is not, "Hey, this is a free reading app," the offering is, "Hey, this is a story that's going to ignite your imagination and give you all of the passion and intrigue that you're looking for."

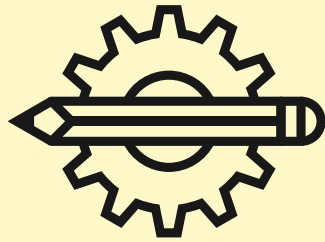
## Make a seamless transition from ads to the onboarding experience

What we can do is curate an onboarding experience that puts those main themes right in front of people's faces in thumbnail format. You hit the app, and boom - here are our most popular stories or genres. So while somebody might hit the app and not get right to that exact story they were looking for, they could navigate there.

## How to use onboarding to your advantage

We're trying to incorporate a feel out survey at the very beginning of the onboarding experience - What are you interested in? Here's a list of themes that we have available that we know are pretty popular, so which ones are speaking to you the most?

And that can help us get them into a certain kind of onboarding flow that might expose them to stories that they're more interested in.



**GROWTH  
ENGINEERING**

## How to apply Media Mix Modelling based solutions to mobile apps - Brian Krebs, CEO at MetricWorks



Brian Krebs,  
CEO at MetricWorks

[Check out the entire episode](#)

## What is Media Mix Modeling?

Media mix modeling is a technique that's been used for decades now in really big brand advertising like for consumer packaged goods, retail, that type of thing. It's been used historically as a strategic type of measurement. It's been adopted by those types of verticals and industries specifically because it works only with aggregated data, which often is all they have access to. And it gives them an understanding of incrementality rather than last touch, which only works for some digital publishers.

## Last touch attribution vs. incrementality

Last touch attribution, and even multi-touch attribution, have serious problems. Especially the last touch attribution where the mobile industry has largely fallen for many years now. It has one fundamental issue which is, it assigns all value to a single campaign. And that campaign is often just randomly chosen with some pretty specific biases towards self attributing networks and naturally high engagement ad units like video and playable that tend to just scoop up a lot of these last clicks whether or not they're truly adding incremental value to the overall media mix. Media mix modeling is one way to measure incrementality. But incrementality is a very, very important measure. In fact, I would argue it's the only important thing to measure.

## Why MMMs are more easily applicable to mobile apps than to other types of businesses.

MMMs are more applicable to mobile app companies than to other types of companies because there's just fewer general significant impacts or factors that significantly impact overall app performance or product performance.

You need to understand things like seasonality. That's one of the biggest keys. You need to understand the impacts of seasonality and day of the week. On weekends you have spikes, on weekdays you have dips, these impact your overall app-wide performance.

## Daily data in mobile is very valuable

Another factor there is, mobile tends to have access to very, very consistent daily data. Whereas, other industries that have been using it for many years find it tougher to access that data consistently. So mobile is prime for media mix modeling.

## Apple and Google's privacy changes have accelerated adoption of MMM based solutions

Here we are - Apple's IDFA changes, similar changes even if later announced by Google, and I think this is the catalyst now where we're seeing players enter the market with these types of MMM-based solutions. And there'll be more to come, with an overall industry wide adoption in the next couple of years really.

## When incrementality is truly valuable

Incrementality really comes into play as being truly valuable when there's more audience overlap. When you're running on multiple channels, even two, or you're running many campaigns across one or more channels with a bunch of targeting where there's audience overlap.

## MMM requires a different worldview

The idea for marketers with this sort of worldview - which is quite different than the worldview taken by last touch - is that conversions aren't the product of a single touch whatever happens to get the last click before conversion.

## The problem of multicollinearity

The bigger issue from a data science perspective is multicollinearity. You just can't be spending, or having the same amount of impressions, for each campaign every single day. That's the issue because when you have two more campaigns with the same spend and same impressions every day over time, it's impossible for any regression mechanism - including the one used by media mix modeling - to isolate the effect of any of those campaigns.



## Measuring outcomes from MMM based analysis

What if we stopped spending impressions on this campaign completely? The model would say that your overall app-wide revenue, let's say, would decrease by a certain amount. That is the amount of revenue that should be "attributed or allocated" to that campaign. And that opens the door for many different KPIs that are kind of traditionally last touch KPIs served by the MMP that also account for incrementality which is one of the key benefits of using an MMM.

## 🌟 How to build a bidding decision engine to future-proof your user acquisition activity-with Jayne Peressini, VP Growth at Dapper Labs 🤖



Jayne Peressini,  
VP Growth at Dapper Labs

[Check out the entire episode](#)

## The future lies in self-sufficiency

What if we brought the decision engine in-house? What if we didn't have to share data with the likes of Facebook or others to create lookalike audiences and to be reliant on their algorithms? What if we could do that internally? Which isn't impossible, but it does change the landscape of a marketing team internally from relying on others to do a lot of the algorithmic work and bringing that in-house.

## SKAdNetwork is a part, not the whole.

There's no doubt that we're still driving towards being compliant with SKAN and we are buying SKAN and we are focused on partnering with our partners to get them compliant with SKAN. But it's a fraction of overall inventory. I can't help but think, as any gaming company will look at, let's say emerging markets, Asia, where iOS isn't the majority, it's not even a sliver of the total.

## There are no shortcuts

The crawl-walk-run approach is you start with what you would consider linear optimization every day. You look at your inventory coming in and you cut the bottom 10% or basically the most inefficient sources that your campaigns are running on. And you continue on. Then you get more sophisticated where you actually start doing bid modifications.

## The perceptible shift towards retention

We're going to see the deprecation of IDFA as a forcing function for a lot of gaming companies to become more sophisticated in their life cycle. And one of those aspects is bringing a decision engine in-house to help with promos, offers, where to send users to and manage it in a way more sophisticated manner.

## There are going to be challenges

Programmatic, for a lot of people, "failed". Not because it wasn't working overall, but it wasn't as efficient in comparison to channels like Facebook. If you have channels that aren't accessing as much data, you can't leverage, you can't send your own first party data as much as you did. The gap between the performance of programmatic versus a performance of something like Facebook, that gap is closing.

## Start asking questions of your DSPs

If you're already working with the DSP, start to engage with them. Not just as an inventory source in terms of throwing a budget at them, but asking, "Hey, can you walk us through a little bit more on how your algorithms work?"

## How to build bidder as a service on top of a DSP

Ask "Hey, do you allow bid modifiers? Can we upload our own bid modification sheets? Hey, do you allow us to host our own algorithms and then just leverage your tech essentially to access inventory?" I mean, bring your algorithms is a generic kind of an umbrella term. Proprietary decisioning that the advertiser can bring to a DSP.

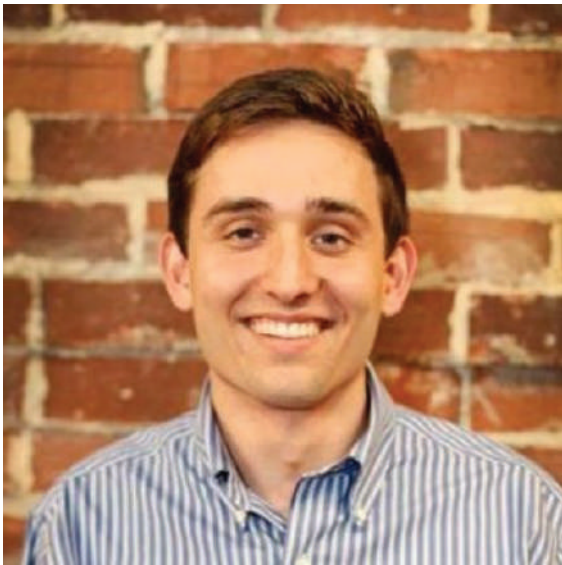
## How to discover efficiencies

The fee that an SSP has with the DSP and the exchange - if you add up all of the supply path optimization and you basically take inventory of all of the cuts along the path of how that one media dollar that you're intending to spend on inventory gets shared, then at the end result, how much of that actual original dollar is spent on media. Try to take that back. That can and should be factored into the efficiencies that you're gaining with a decision.

## In-house decision engines are a long term investment

Decision engines are hard. It is more than a quarter endeavor or a two quarter endeavor. This takes over typically a fiscal year, if not more to get a V1 going. I would also suggest that you don't just think about SKAN in the context of iOS, but think about all of the protocols that you might be engaging with in the next two to three years and where that point of diminishing returns is in terms of how focused you want to be on overly optimizing conversion values on one protocol.

## 😱 Is your CAC 10x of what your platform reports? How to surface incrementality issues in your paid UA—with Adam Lovallo, CEO and founder of Thesis 🔍



Adam Lovallo,  
CEO and founder of Thesis

[Check out the entire episode](#)

### What does it mean to have an incrementality problem

If you have an incrementality problem, it means that you're investing in acquisition channels—whatever they are—that might appear to be driving conversions, but in fact are just taking credit for activity that would otherwise have happened normally.

### An early signal of an incrementality problem

Look at the ratio of conversions that are coming 1-day post click versus 7-day post click. Basically, 1-day post click conversions are much more likely to be accretive than even 7-day post click conversions.

### Regular CACs can be misleading

They say: "Our CAC is 70." Okay, seems pretty good. B2C subscription e-commerce 70? Alright. But I looked at it, and said: "A lot of the conversions are coming on a view-through basis." And if you look at the performance solely on a 1-day click basis, it looked horrible. So we ran an incrementality test, and lo and behold, the cost per incremental purchaser was literally \$1,000+. So more than 10 times—13 times or something—what they thought they were acquiring customers at.

## The last ditch prescription to solve incrementality

If you have that kind of a problem, and you do all the steps, and it's still looking bad, it's a channel question. Change the channel mix. If Facebook's not accretive, or Google's not accretive, do something else. Maybe revisit it in 6 months, but you're trying to push a boulder uphill. It's just, in my experience, really hard.

## There are radical alternatives too

And then I have a subset of clients, even today, who run the incrementality tests, the results are not so great, so then they choose to ignore the incrementality test and just keep doing what they're doing. Just like willful ignorance, which honestly, I respect. That's a very aggressive choice; you have to be real confident to make that call. So that's another solution that honestly is employed more frequently than you might think.

## Some metrics you have to take with a grain of salt

Some say: "Well, if I bid for 1-day click then my CACs are going to be terrible." Well, your CACs are terrible. You just choose to look at the numbers that look better. I cannot emphasize enough: who cares what the Facebook pixels say? It's meaningless.

## Incrementality often exists with multiple channels

The more channels you have running, the more likely you are to run into these kinds of problems. Again, the root problem here is just that the platforms are configured, via their attribution settings, to take credit for the conversions that they drive. And really, they're configured to take credit for as many conversions as possible.

## How to use geographies to get clean data

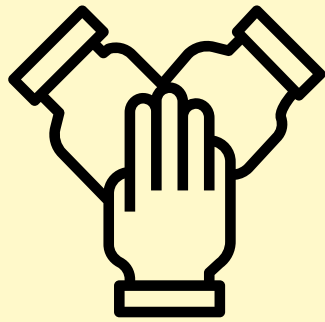
I think, for an app install advertiser, the main solution is to think about geographies. And say: "Well, I'm going to run these channels on and off" Based on—it could be countries, or even better, it could be zip codes or postal codes at that level, so it's sort of randomized. And then look at performance based on geographies.

## The right way to approach optimization of performance

If you approach the problem from the perspective of: "I don't care what the pixels say, I just care about the outcome." Then you work back. You start with the thing you care about, and work back.

## Going old school is a viable solution

Certainly looking at blended CPA, or marketing as a percentage of sales is old school, obviously, but that's a good grounding number to keep in mind, basically, to keep yourself honest, as a performance marketer.



**HIRING, LEADERSHIP  
AND  
GROWTH TEAMS**

## Zero to launch: how to (actually) build a casual gaming studio from scratch-with Sophie Vo, Studio & Game Lead at Voodoo



Sophie Vo,  
Studio & Game Lead at Voodoo

[Check out the entire episode](#)

### There were clear priorities with the team

I really wanted to understand, what were the expectations? What were the fears or concerns? What was the knowledge? That was my priority at the beginning - to build trust. And that may sound a bit obvious. But it was not the case when we started. They didn't know me. So, I wanted them to understand more about my vision, my approach. So that was a lot of informal moments that could have been after work, drinks, events, crossing in the hallway, having a five minute conversation, having spontaneous chats. A lot of this happened during the first three months. And it was very critical that I spent this time to build the trust, understand them, and build it the right way. That was my very first priority.

### Slow and steady for sustainable wins

I've been long enough in the industry to see that when you build things really fast, even a game or a team, then things don't go well. When people leave, it's actually much more work and takes much longer to rebuild the team. So I drew several scenarios for myself, where the worst one could be, I hire really fast, I have people who're on a journey that they don't know about, I don't know about. They get frustrated, they leave, and I find myself in March 2020 with no team. I have to start over and then very likely, I will not reach my goal. So I was willing to invest more from the beginning to ensure the long term viability of a team. And with our collective intelligence, we would figure out what is the best game we could release.

## How to experiment effectively

My very first hire was a developer. In my opinion, with a developer we could already start to prototype. If the first position you have is a developer, you start to test your assumptions, experiment, test your theories and release things quickly. With the first developer we prototyped two free games. So I could learn the whole process of how to test marketability and how to make creatives myself. So I was just recording the gameplay, very hypercasual style, and putting it as a creative on Facebook. I learned the whole process of how to release the game. That was a good training ground before the others came.

## The importance of a growth mindset

I had people who moved from another country to come to Berlin and join the team. They barely saw Berlin or met people in Berlin. It was a bit of a shock for some of them. They all stayed in the end. They had very strong resilience and a growth mindset. They committed to come, they committed to live the experience of an expat and they tried the whole year. That was one hard thing, to balance the emotional state of people who are just starting a new job, come to a new country and if things don't go according to plan.

## The importance of staying calm in the face of stress

I had my plans of how we should structure the team and how we should go forward. But there was a lot of friction and resistance at the beginning. I didn't understand at that time, I thought it was that, maybe we weren't aligned. But I completely missed the point and I wrote about it in my personal introspective, that people were really stressed. You couldn't even take a step back and analyse because they were just trying to survive. Once it clicked, things got much better for the summer. I took time for myself, to take a step back, handle my own emotions, my fears of everyone leaving, the things I try to avoid by spending the time to really hire a team. And then, I thought, "Okay, well, that was inevitable, because everyone would leave, given the circumstances." So of course, I was really stressed. And when I started to let go a bit, and thought "Okay, I have to let people decide, Everyone is responsible for their choice in their life", things actually got much easier, because then I was in a position to listen, to support, to explain, while staying calm, and also keep the focus of the team towards what we were trying to build.

## The differences between hypercasual and casual games

A hypercasual game could be released in a weekend. And then within a month, you're done. You put all the things that you need, like SDK, ads, you're ready to go, and you can start to be profitable from the month after, in the best case.



A casual game is impossible to make in a week, release it and be profitable, just a few days after. This is a completely different model. If you're familiar with the model, sometimes you pay a lot up front, and only a year after you see the money back, and only a year after you're profitable. It's a different model. Of course, there were sometimes the questions of, why is it taking so long? Not understanding what all these people are doing in a team of nine, compared to a team of three in hypercasual. Not understanding the depth of game development, because it's much more complex, when you create something that has to last for a year than something that can last for a month. The system and the thinking is different. It was a bit of an adjustment to understand this difference in the velocity and team size.

## How retention is the key to high LTV

If you look at the LTV prediction model, you see that the biggest leverage to really have high LTV is retention. So then it's not so much about adding lots of ads from the beginning. Okay, you can do that from the start. But what is really important is having a product that can engage players for a long time, because that's what makes your prediction solid.

## Extreme transparency and some hard questions

We have an AMA every week, very openly and anonymously, on a weekly digest. And someone wants to know, what are the casual teams doing? They've been working on what? Again, for x months? When do we see something they released? Was it a good investment? These are really hard questions to read. And of course, you are always happy to answer and talk about long term things. So here, patience is rewarding.

## How to turn a failure into a success

We did really drastic changes to pivot the game, to really analyze correctly, do a maximum of player research. Then when we released and we had a change it was really significant. That saved the game! Then we started to get positive attention. Okay, this team, they know what they're doing. Maybe we didn't give them the time or the credit to prove it. But they proved through a test that they can change the fate of the game after two, three play tests. And that's what we continued doing.

## Clarity comes from the leadership

There was a discussion at the beginning of the year directly with him (CEO) first, for me to understand what my perception is, fears that are imagined on my end, because I was so isolated in Berlin with my team. Reality is in the voice of the CEO, so that helped a lot. And I think it gave awareness to him as well. But when he thought we were fine, he realized that we were going through a really hard time and giving support was actually important, and maybe a responsibility he could take on to help us to succeed.

## Clear channels of in-team communication.

When we're bringing up some things like, "Oh, do we have the support of the company? It feels like maybe they're not, or seems like people are questioning what we're doing." They were asking me, what I thought about it? I shared what I thought, what was my position, and what I believed in. I had confidence and trust in what we were doing. But that was not necessarily shared across the company. Nevertheless, I said that's the confidence I have. I believed in what we were doing. It was just a matter of time. So at least it was reassuring on that part. So when one of us has confidence, that can also inspire confidence in others. However, I was also very transparent about explaining the context. It's a hyper-casual, traditional company. Where they come from, that's what they value, that's what they see, that's what they know, it doesn't make them bad.

 **The opportunities and challenges of moving in-person teams remote and back again – with Seth Berman, Senior Director, Performance Marketing at Adobe** 



Seth Berman,  
Senior Director, Performance Marketing  
at Adobe

[Check out the entire episode](#)

## There is a downside to a globally accessible talent pool.

The flip side is that it does put pressure over time on wages for average performers. Nobody wants to think of themselves as a B-player, but there are B-players out there. If a company can hire somebody anywhere, then they're not necessarily going to need to settle for anything less than the best, just by hiring locally.

## Video meetings are great equalizers

One of the biggest benefits that I've seen of video meetings is, it really is an equalizer when everybody is on the screen in the same size box. It's a complete equalizer in terms of people having a voice, and there's no special seats at the table. There are these dynamics that happen in in-person meetings that put people in positions of power or less power in the physical meetings. But when you're on video, and everybody's the same size rectangle, there are certainly a lot of disadvantages to it, but it's really equalizing no matter who is on the call. In a meeting, everybody has the same real estate.

## Aspects of the company culture that are conducive to remote work

Those companies who have and had a strong writing culture and asynchronous work model, I imagine that they are having an easier time with remote work. I would say for us, it's much more like I'm in meetings—and for most of the people on my team, it's like meetings—from the beginning to the end of the day and then work after that. That is pretty challenging, and I would love to see us do more writing, more asynchronous work and have fewer meetings.

## It is much easier to hide out when working remotely

It's easier to hide out in a remote situation. It's easier to turn off your video, and not say anything. And sometimes you can't see everybody who's in the meeting on the screen at the same time. It's harder to hide out if you're in a room with somebody than it is when you're on video. So when I talk about it being an equalizer: when I'm in meetings with the most senior leaders of the company, I feel more comfortable. But I do think it's easier to hide out, so you have to really make an effort to ensure that people are taking advantage of that.

## How will a hybrid work situation work

I think a completely remote situation would work. I just wonder how the hybrid situation is going to work. What new thing will come up when you have some people in the office and some people on video—how is that going to go? Is that going to be as productive as everyone on video? Like, everybody on video is a known thing. But then some people on video and getting some people in-person is a little bit less of a known thing.

## The pandemic has uncovered surprising challenges

I would say the biggest challenge with performance management isn't necessarily related to the remote versus in-person. The challenges in my experience have been the things that we've been navigating and being sensitive, empathetic, and understanding of different things that different individuals are going through.

## The zero meeting workplace – with Brett Nowak, Founder at Liquid and Grit



Brett Nowak,  
Founder at Liquid and Grit

[Check out the entire episode](#)

## Hiring a global team is made easier

I wanted us to be able to hire people all over the world and the no-meetings helps with that, and allows people to work wherever they want to as well. So if you hire someone, for example, in Portland, which we did for our lead writer, and he now lives in Spain and that's totally fine.

## Workplace bias that is introduced by meetings

I felt like meetings were a place that was full of bias where you'd have somebody, for example, who was a very strong verbal negotiator, or very authoritative or loud, or for whatever other reason was good at 'meetings'. Those people ended up driving a lot of decisions. But I never felt like that was a correlation to having great ideas. They can have great ideas. But a lot of times the quiet person in the back of the room has great ideas, too. I felt like if I eliminated meetings, I would produce better decisions.

## Replacing a meeting with a process

A meeting is something that shouldn't ideally be done multiple times if it's about something that we're going to do often. Typically, the process of having that meeting, or the thing that comes up during that meeting should be something that eventually we should try to replace with a process or an outline or a comment on a doc.

## Change begins at the top

The change has to start from the top. Most meetings are kicked off by managers or execs, because meetings are easy ways to get information. So managers are likely to do it. But if you're the owner of a company like I am, and you're also the manager, then having all your employees and workers stop what they're doing and explain to you something that's probably trivial for them to explain to you is pretty costly. So I just made it a point that the no-meeting culture was coming from the top. I wasn't scheduling any meetings with people.

## Zero meetings lower switching costs

As a manager, if I don't know what's going on with a project, instead of calling a meeting and interrupting my entire team, which is extremely costly, I can jump into the Dropbox Paper, and I can ask questions, "Hey, How is this going? When do you think is going to be done? Can I check it out?" and all the documents are in there as well. So I can open and look at it. The nice thing about that is there are such low switching costs. When my team is done with their project, they can respond to me.

## Meetings are easy and a way to kill time

The reason why people like to meet is because it's easy, and it kills a lot of time. I sort of equate it to – humans like eating doughnuts too, right? And if you let humans eat doughnuts, we'll just eat doughnuts until bad things are gonna happen. As a leader of a company, you have to be a little bit on the lookout for those things and say, "Well, yeah, we'd like to get into meetings to be social and talk about our dog and cat and what happened this weekend." I like that just as everyone else. I'm kind of a chatty Cathy myself. So it's not like I'm sitting here going, I hate meetings. In fact, I like meeting people. It's fun to learn about the people in 17 different states in America and in four different countries. That's really interesting to me. But at the end of the day, it doesn't make as much money for my company and doesn't make us keep our jobs as secure as if we don't talk about those things.

## When to absolutely have a meeting

I do think that feedback, or anytime we're getting emotional, or conversations on career progression, that's probably a good place where you may want to have a meeting.

## Emotional cues are best picked through meetings

Anytime I feel like I'm getting emotional, or someone else is getting emotional, which happens fairly infrequently, because we have less meetings - which is another huge benefit. There's just a lot less of that human bickering and drama, because you just don't see people. But anytime I feel as a leader, I'm frustrated about something, it's either good to have a meeting, or it's good to record yourself so that that person understands how important it is to you.

## Companies cannot replace families and friends

It's very dangerous for companies to say, "Hey, we're going to make it so that you're going to have your social outlet here." And I also think it's bad for the employees in many ways, because a lot of them are replacing their real friendships and their real families with what they've perceived to be families and friends. And the company is misleading them by saying that they are treating them as family. We are not treating people as family, because at the end of the day, the company itself has to act objectively about what's best for the company. And to do that we will let people go, if necessary, right? And that's not a family.

## What's a costly meeting?

Let's talk about a costly meeting - you're going to have the entire company on Friday morning at 10 o'clock, sit there and listen to the CEO talk about the company's strategy, and the other leads for an hour. And when I looked around the room, 75% of people were just sitting on Slack trying to get their work done. So the entire company has stopped production to listen to something they're not interested in, and now multitask to actually just get their work done. And they're gonna get frustrated, because they're not done with their work, and they're going to stay there late on Friday.



**MONETIZATION**



## How hybrid games combine the simplicity of hypercasual and depth of casual games – with Jon Hook, CEO at BoomHits



Jon Hook,  
CEO at BoomHits

[Check out the entire episode](#)

## Hypercasual games are reaching a point of saturation.

The reality is there's only so many interstitials and rewarded videos you can physically cram into a level before negative impact on your retention. If you read a hypercasual review, there are notes saying - there are too many ads. That is a challenge now for the industry because I think the industry is growing in terms of players and number of games, but in terms of classic monetization, perhaps we are close to hitting peak revenue.

## What are hybrid games?

Within hybrid games, what labels might people think of? I would think of hyper idle games – not full on idle but taking elements of hypercasual up. This genre just exploded and I would say every hypercasual publisher is now building this concept of idle arcade games. So it's got that grind you experience in an idle clicker or classic idle game. But it also does have some element of actual adventure and collecting in it with some hypercasual mini games.

## The benefits of including IAPs in your game

Generally once you have IAPs in your games the goal is set, let's say your day zero target might be 60 cents instead of 40 cents. So it gives you a little bit more breathing room. Therefore the CPI you need to balance with ARPU to give you a chance of scaling a profitable game is higher.

## CPI is not all that matters

It's not this obsession about low CPI. Obviously, low CPI is great, but it's that initial build, it's about looking at play time. It's not like you're going to nail \$3 day zero on the first attempt, but it's looking at more particularly rewarded video and interstitial frequency as well, to give you this validation that "Okay, now it's worth putting some proper development into this game." Because you might be looking at a 4-8 week development cycle versus two weeks for hypercasual.

## The next step to monetizing hybrid games

For hypercasual, if it's gonna go anywhere, it's this movement more into a play to earn model. I'm doing the same thing just swapping the coins I'm earning for some form of token. It could work with some of the publishers. When you've got big enough games, the audience can take that token across games, I think that's the key.

## The key to finding credible publishers

You do need to make sure that publishers have the set of tools for hybrid games. They need to have experience in IAP games. It's not easy to just suddenly switch your knowledge around IAPs, both from a user acquisition monetization perspective and also BI. You're going to want to think about live ops and live events in your game.

For example, there are lots of peak gaming times around, say, national holidays, where you can do some really cool events. So whether it's around Diwali, Christmas, St. Patrick's Day, Valentine's Day, Chinese New Year, these could be really great revenue events for your game. But you need a publisher that has got experience doing that. And traditionally, not your classic hypercasual publisher, because they don't get the casual games.

## What is the grind in hypercasual games?

You still need this addictive core loop. It's not as simple as – I just build more content and more matter and I get more playtime and more monetization. That's absolutely incorrect. You still need this fundamental core loop. People talk about the grind. When you come to these idle hybrid games, where I want to really feel like I'm grinding to achieve something, it's that grind and that loop that you need to perfect. And that's what drives the play time.

## It's unnecessary to rush to a soft launch and add networks

In a hypercasual, it's rush, rush rush, if you don't rush, everyone's going to copy your game adding loads of networks. I think in hybrid, that is not the mentality. Don't get me wrong. If you first test the game, and you've got great play time, day zero, day three looks nice, you've got great content, then of course, let's do some more testing and add some more networks, because logically, we're not wasting any users.

We're making money off each user and we very quickly need to start thinking about day seven. But if we do the first test, and we've got some 20-30 minutes of play time, we've got some nice rewarded video engagement and CPI is good, then why do we need to suddenly rush a soft launch and add loads of networks and just burn users?

Why do we do that? Because it's a lot harder to just suddenly copy this game like you can in hypercasual.

## How to find the balance between monetization and retention – a mini-case study



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

A common question we receive is – it's all very well to say "work on retention" and "improve retention."

But how exactly do you do this? How exactly do you improve retention?

Yes, each product is different – and while there is no one-size-fits-all solution, one direction that you could explore to improve your retention would be to look for ways to sacrifice monetization for retention – or in other words, look for ways to reduce your short-term monetization to improve your long-term retention.

A good way to understand this could be to look at this via an example of a word game that I worked on a while ago. This was a crossword game with daily content – it offered users 1 crossword per day – in some ways similar to a traditional newspaper that had a daily crossword.

Users would receive 1 puzzle a day. Users started with a certain number of coins – and spent 10 coins a day on each day's puzzle. Our original hypothesis was that by the time the users ran out of coins, they would be hooked to the game and be willing to spend on IAPs to play more.

Unfortunately, when users ran out of coins, they'd give up and leave the app altogether. There would be a huge dropoff in retention – because users had to pay to play at that point. This made the app economically unviable,

This was a problem – the users were not getting hooked by the time we were hitting them with a paywall.

At this point, we considered a few options:

- giving them more coins to start – maybe they weren't getting enough time to get. So more coins would give them a chance to become more 'hooked' to the game before they'd have to pay.

OR

- making the daily puzzles free and monetizing primarily via ads.

We were not sure if the first option would work well – if users were not hooked in a week, maybe they wouldn't get hooked in 2 weeks or 3 weeks. Besides, if we looked at our analogy of our crossword puzzles being similar to daily newspaper puzzles, users were expecting to get their puzzles free every day – almost automatically with no friction.

So: we did the latter – to make the daily puzzles free, to sacrifice monetization for retention – with the hypothesis that if we monetized our retaining users via ads, they would perceive the puzzles to be free (again, much like a conventional newspaper that is ads subsidized) and if they retain strongly long term, they would monetize much more strongly over the long term.

We expected IAP monetization to drop massively – but curiously, the drop wasn't huge – because users were still using coins to buy archived puzzles and themed puzzles – because they saw these as 'bonuses' over and above the daily puzzles. So while they perceived the daily puzzles as free, they perceived the specials and archive puzzles as 'bonuses' that they were willing to pay for.

The retention gains were huge – because the daily puzzles were completely free (as compared to having a paywall earlier). More importantly, our longer term retention stayed strong too – ie: we saw very little dropoff after d14 as we went to d30, d60, and beyond to d365.

This of course was the retention improvement we talked about in one of our earlier episodes – How PuzzleSocial Grew UA spend from zero to \$1.5mm per month. And as that title indicates, that was the kind of unit economics and spend that this retention improvement was able to unlock.

So: when you're looking at retention improvements, one key prompt or question you can ask yourself is: how can I trade off short term monetization for long term retention?

## Why your LTV might differ from your analyst's LTV



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

With a lot of marketing decisions made based on LTVs and CPIs, something that many marketers forget is that LTV is a made up number. This is primarily because the concept of lifetime in LTV is never clearly defined, it's always ambiguous. While obviously LTV can be an actual number right? So it can be your actual D30, D90 etc.. It can also be a projected estimate. What I'm underscoring is that there is a lot of subjectivity in how LTV is defined. And this is oftentimes a result of internal corporate political dynamics. This is, especially in companies that manage portfolios of multiple apps. The way they use LTV to make decisions within budgets or other resourcing can be very different.

I've actually seen companies where different teams calculated LTVs very differently. And this resulted in significant political turf battles, just because there are scarce budgets for marketing and scarce resources for analytics, engineering etc. So a lot of these decisions have to be made based on LTV and ROAS. A lot of the subjectivity and contentiousness comes on the basis of a few key questions. And these are some examples of the questions where there can be subjectivity involved.

One could be: how do we compare LTV or payback period for an app that has front loaded monetization versus one with longtail monetization? You can't clearly calculate LTVs for the same day.

Should we use a longer payback period if an app has very strong, longtail retention? And if most of its revenues come after year one?

What statistical models should we use to calculate LTV? Should we use conservative estimates or aggressive estimates? I've often seen two different analysts come up with very different estimates for what LTVs could be.

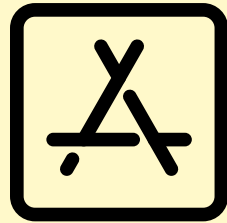
The fourth is, should new and unproven games get bigger, launch budgets? I've seen this happen. Just because there's somebody in charge of a new game that has significant political clout within the company, they are able to get larger launch budgets.

Should we allocate a disproportionate budget for a game that is wildly profitable from its legacy users? It's got a lot of users that are making a lot of revenue. But its new user LTV is actually very low. Should you actually give it more budgets? You can make a case for not giving it any budget, because new users are not but getting you any revenue. You can also make a case for giving it a lot of budget because it is widely profitable. Should we have a very liberal LTV model if you have a viral game? There's no one answer to that.

Would you attribute a lot of the organic revenue to paid? You can basically argue one way or the other to that question, but should we optimize for monthly profitability, quarterly profitability, or long term profitability? There's no one single answer to that question.

A lot of these questions have so much subjectivity involved. In an ideal world, a lot of these decisions will be made strategically with the goal of maximizing a company's long term growth. But the reality tends to be far more complex and messy. Oftentimes, the LTV calculation that prevails, can come down to who has more power in a situation, which could be political power in a corporate setting.

Oftentimes, this can also just come down to who's more articulate, or who has more allies and lobbying for some of these resources and making a case for themselves. All of this is to say that while LTV has utility as a marketing metric, in reality, decision making is never as clear cut as a financial model can make it to be.



# **iOS STRATEGY**



## State of iOS UA: Stats, Trends, and Strategies: our webinar with Singular, Liftoff & Adcolony 🤖



John Koetsier, Journalist/Analyst at Forbes  
 Eran Friedman, Co-Founder & CTO at Singular  
 Ben Holmes, GM, DSP at Digital Turbine  
 Pedro Ponce de León, Global Head of Sales Engineering at Liftoff Mobile, Inc  
 Shamanth Rao, CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

## Advertisers use probabilistic matching

**Pedro Ponce de León:** [Advertisers] may also be looking at SKAN, but SKAN is more secondary because they're actually turning on P-matching (probabilistic matching) using this for 14.5 plus devices. And you can see there that it's actually growing; 80% or so of our spend is utilizing P-matching.

## Big social media publishers don't support probabilistic matching

**Eran Friedman:** But it is worth keeping in mind that some of the biggest publishers out there — Facebook, Google, Snapchat, Twitter — don't support probabilistic matching at all. You can't really run any campaigns with them. So, from a macro point of view, possibly, a lot of the spend out there can't really work with probabilistic matching. We're working with some of the top brands out there and a lot of others just can't afford to activate it because of legal or business concerns around this. In general, I would say that looking at the privacy trends out there, I wouldn't count it as a long-term solution but definitely something to be aware of.

## Blended CPAs have not changed, but Facebook's reporting has changed dramatically

**Shamanth Rao:** Recently, I was looking at an account whose CPA on Facebook pre-SKAN/pre-ATT was \$40, while post-ATT, this was \$2,500. That was the CPA increase reported by Facebook. And when we looked at the blended metrics, the blended CPA had not changed. It was exactly the same. That's the challenge.

## Ad publishers are hiding data from marketers

**Eran Friedman:** Basically, Apple is censoring some of the post-install events. So, some of your installs are generating post-install events but it's hiding it from you. So, they basically see crazy CPAs, but that's because 80% of their installs are censored. So, they can't really see the true actions that their users are making. The problem gets harder in SANs, as Shamanth noted, because usually, a single Facebook campaign is running across multiple campaigns. So, the bar is even higher than just 30 installs per day. Facebook, for example, recommends a minimum of 108-128 daily per campaign.

## Maximize signal density

**Shamanth Rao:** Something I would also recommend is that people try and maximize signals, just because this is one of the ways you can address the privacy threshold challenges. I've seen a number of SKAN reports where bits 4, 5, 6, basically had no value because those just never get fired. You have a super upstream purchase event in there. And what's the point if it's never getting fired? So, you want to set up the conversion value schema so as to maximize signal density.

## A wealth of data to a very small stream

**Ben Holmes:** One marketer went from 71 post-install events down to 2. It's just a massive drop in how they do that: post-install conversion and the funnel they were trying to get down, but it's the only way they could start to rebuild that dataset.

## iOS 15: No more self-attributing networks (SANs): how SKAdNetwork will allow more objective campaign measurement soon



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

One of the bigger changes that is coming with iOS 15 is happening mainly under the hood – and this is very significant because this will mean there will be no SANs starting iOS 15 (well, no SANs except one – I'll explain that caveat in a bit), and that has far reaching implications for advertisers.

As background, until this point, whenever a self-attributing network (SAN) like Facebook, Google, Snap or Apple drives an install, it does not share the postback with an MMP – both pre and post SKAdNetwork. Here are the mechanics of how SANs have worked thus far:

- When a user clicks on a SAN ad, installs the app and completes a post install event, the SAN records the impression and click data associated with the user.
- For non-SKAdNetwork traffic (Android and non-SKAdNetwork traffic in iOS), the MMP records the in-app event data – and sends this device level data to the SAN. If the SAN has impression and click data that corresponds to the device ID of a user that's had an impression or click in the SAN, then the SAN 'claims' the installer and reports this claim to the MMP.
- The MMP deduplicates this 'claim' – so if two different networks 'claim' the user, the MMP gives credit to only the network with the last click. (But of course the SAN will still report all the installs and events they claim – they get to grade their own homework).
- This setup of course has changed with SKAdNetwork since there are no user level post install events. For SKAdNetwork traffic, the SAN records the click and impression data; and then receives the postback for installs and conversion values (because it's a registered ad network under SKAdNetwork).

- The SAN then reports on both actual SKAdNetwork data as well as 'modeled' values for post-install events. MMPs (and advertisers through them) receive the SKAdNetwork data in aggregate form – but do not receive individual postbacks for installs and conversion values under SKAdNetwork.

Hopefully you can see the challenges with this approach – primarily that you basically have to take the SANs' word for whether their traffic has resulted in a converting user or not. Oftentimes, as with view through installs, there is a grey area around whether a network caused an install or not – and oftentimes SANs have been known to bulk up their install and conversion counts by including view through installs.

And of course, modeled data for SKAdNetwork is, well, modeled – and not objectively accurate. Plus if a network isn't held accountable for the accuracy of the aggregate SKAdNetwork data that they send, you have no idea as to what they're doing under the hood.

In fact, one SAN we know was intentionally replacing the 'null' conversion values in SKAdNetwork by zeros – and this very fact suggests that more nefarious actors could do worse if they wanted to.

Well, all of that is set to change with iOS 15. With iOS 15, advertisers – or MMPs acting on their behalf, can receive raw postbacks for SKAdNetwork data. While of course SANs can still claim installs or conversions as their own, MMPs and advertisers can now objectively validate if these claims are accurate or not.

As a result, marketers are going to be able to do an apples-to-apples comparison between networks, which right now they haven't been able to do because the bigger SANs (Facebook and Google) have tended to report modeled data – which are not directly comparable because they have had different models.

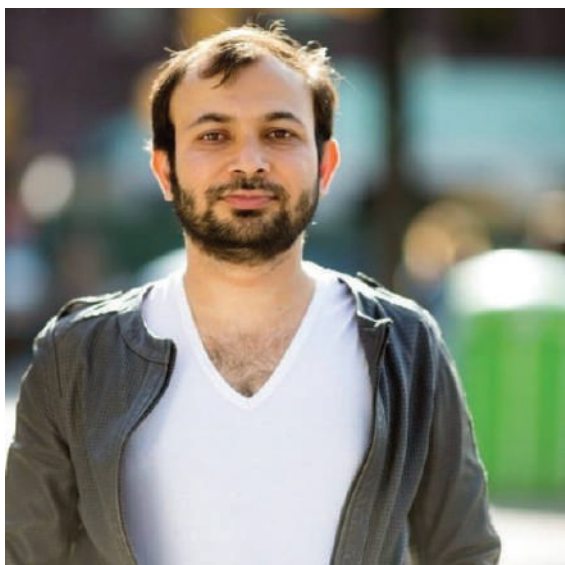
Besides, the bigger SANs have tended to run 'under the hood' campaigns due to which they trigger different privacy thresholds compared to networks that run campaigns directly as per SKAdNetwork campaigns. Consequently it's been hard to ascertain the true number of conversions generated by a campaign right now, since a number of conversions are getting obfuscated – that's set to change as you know exactly how many conversions were generated by an SKAdNetwork campaign, and compare these across channels.

With iOS 15, even if Facebook and Google run 'under the hood' campaigns, internal teams will be able to look at how these campaigns are structured – and more importantly, use this campaign level data to do an apples-to-apples comparison between sources.

The one exception to all of this, is Apple Search Ads, which will not run via SKAdNetwork, and will be tracked via Apple's Ad Services API – which will continue to be a self-attributing network. That's a different conversation altogether – but iOS 15 solves this problem for all other sources.

Ultimately this will make measurement much less hairy and much less problematic – and that is definitely something we're looking forward to as advertisers.

## The state of Google Ads UAC post ATT/iOS 14.5: 8 big changes & challenges



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

It's been a while since Apple pulled the trigger on iOS 14.5. ATT adoption is still not close to 100% – and in this episode we wanted to highlight the key changes that we are seeing with Google Ads/UAC.

### 1. We're able to run campaigns & optimize for events without Firebase.

While Google's earlier guidance seemed to have been that you will need Firebase to run campaigns on iOS 14, we're seeing that that isn't necessary – at least as of today. Google doesn't have dedicated iOS 14 campaigns either – and iOS campaigns are able to continue to track and optimize for events that are imported from your MMP – at least as of now.

### 2. Way more 'modeled' events.

Google has been clear that most of the events that are actually reported will be 'modeled' – based on their machine learning models applied to their first party data – and based on performance of consented users within apps that have AdMob SDK (considering Google's owned and operated apps have decided not to show the ATT prompt).

Again, this isn't a completely new development, considering that search campaigns on iOS have been modeled for some time now (which we talked about in our episode from March 2020 titled: "Welp! I don't see my Google UAC installs in my MMP.")

### 3. No hard cap on 8 campaigns.

Google's original guidance was that we'd be able to run no more than 8 campaigns – however we see we are able to run more than 8 campaigns right now. To be honest, performance is such a mess that we've hardly needed to make use of this provision right now – but this is useful to keep in mind, especially if you're a global advertiser across many geos.

### 4. No tROAS. Only tCPA, tCPI.

There's no tROAS bidding available – only tCPA and tCPI, which frankly isn't as huge a loss as it might seem, considering not very many folks were able to use tROAS thus far.

### 5. No such thing as conversion value mapping or setup.

This has been a big surprise for our team. There has been no clear or obvious way to map conversion values via SKAdNetwork – or to optimize for these metrics. Looking at Google's official guidance,

*You can easily implement SKAd network solution by upgrading to the latest version of Google Analytics for Firebase. This will automatically register your apps for SKAdnetwork attribution and help you measure "first open" conversions for consented users.*

What about other post install events for non-consented users? There's the implication that the data will be 'modeled' but it isn't clear as to exactly how. However we are able to see these post install events in the Google dashboard right now.

### 6. No way to plug in MMPs – at least right now.

As of now, there seems to be no way to use an MMP to pass conversion values to Google for optimization – or to receive performance data back for reporting. Google's guidance says:

Alternatively, you can use another SDK that supports SKAdnetwork or implement Apple's SKAdnetwork API yourself.

It's silent about exactly how you would do this.

At another point, Google's guidance says:

App Attribution Partners(AAPs) will have access to the same information of SKAdNetwork conversions and App campaign conversions. However, AAPs will not receive attribution claims on modeled conversions, so you will see differences between App campaigns, SKAdNetwork, and AAP reporting.

There is no timeline right now – so a lot of this remains very opaque.

### 7. Reporting is a huge mess.

There is an SKAdNetwork report that you can access within the Google ads dashboard – by going to reports -> other -> SKAdNetwork Conversions.

However, this report appears bereft of much meaning or usefulness – at least as of right now. We can see metrics that Google calls SKAdNetwork conversions and SKAdNetwork conversion value segment – BUT it's unclear exactly what these metrics are since Google doesn't even let us explicitly define SKAdNetwork conversion schemas, and it doesn't let us plug into MMPs to do so. Additionally, the SKAdNetwork conversion value segment is not defined anywhere.

Right now, given the challenges with the SKAdNetwork reporting, we are recommending using the main Google Ads dashboard – to track Google's modeled conversions – at least until we have more clarity around SKAdNetwork reporting.

### 8. 5 day delay in reporting.

Google has said to expect a 5 day delay in reporting of data. This is surprising because Facebook and other platforms advise on a 3 day delay – and frustrating because of Google's opacity around how and why this is.

\*\*

In summary, here are the big changes and challenges:

1. We're able to run campaigns & optimize for events without Firebase.
2. There's no hard cap on 8 campaigns.
3. Way more 'modeled' events.
4. There's no tROAS bidding. Only tCPA & tCPI.
5. No such thing as conversion value mapping or setup.
6. No way to plug in MMPs – at least right now.
7. Reporting is a huge mess.
8. There's a delay of up to 5 days in reporting.

Overall what is clear is that performance, even the modeled numbers aren't great for folks we speak to and work with.

We're hopeful that things will change – and that this mess will resolve itself. We'll keep our ears close to the ground – please stay tuned!

## The state of Facebook Ads post iOS 14.5/ATT: 4 challenges & 4 opportunities 💪



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

It's been a while since Apple pulled the trigger on iOS 14.5. ATT adoption is still not close to 100% – and in this episode we wanted to highlight 4 challenges and 4 opportunities that we see. Let's start with the challenges:

### 1. No purchase data for some apps.

For apps with low payer % (with purchaser based schema), we see no or few purchases reported for purchase optimized campaigns. This is likely due to Apple's privacy thresholds – because if there are very few purchases coming from a campaign, the conversion values for these events get obfuscated by Apple's privacy threshold. At this point there isn't a lot of consensus on "what" the privacy thresholds are, which makes it frustrating.

### 2. No breakdowns between redownloads and new users.

SKAdNetwork postbacks have a flag for 'redownloads' – so technically with postbacks, you should be able to see which users are 're-downloading' an app if you have postbacks available.

BUT you don't have postbacks available – because Facebook doesn't share them with advertisers or MMPs. It still boggles my mind as to why Apple should want to send postbacks to ad networks but not advertisers.

Anyway, what this means is that we won't know how many users are new and how many are returning. In a sense, all campaigns become AAA campaigns now.



### 3. No clear metrics at ad group and creative level

While your campaign level data is clear and can be confirmed as being from SKAdNetwork, your ad group and creative level data is 'modeled' or 'estimated'. While these creative and ad group level metrics still add up to campaign level metrics, these are modeled and imprecise.

Additionally, these metrics are not in an easily readable format in columns like non iOS 14 campaigns – which makes it hard to identify which ad groups and creatives are doing well.

### 4. Reporting is still a mess.

Most MMP reporting is not in a form that can be easily used, which is frustrating. Right now we use Facebook reported metrics as the source of truth – also just because the metrics are presented with more clarity there than the MMPs.

What's also true is that because of Apple's system of timers, most data comes in with a 24-48 hour lag, so we typically have to exclude the most recent 3 days while evaluating campaign performance.

With all that said, there are strategies and things we are doing to combat the above – and while these aren't perfect solutions, these are helping us move forward. Here are the opportunities that we see:

### 1. Install optimization shows some promise.

For multiple apps, we see install optimized campaigns have strong downstream CPAs – this of course is a sharp contrast with pre-iOS 14 campaigns where install optimized campaigns gave very poor downstream performance. We are leaning into this more and more.

### 2. Non iOS 14 campaigns(targeting IDFA users) are still working.

Non iOS 14 campaigns are still functional, likely because iOS 14.5 adoption is still relatively low. We typically run a mix of non iOS 14 and iOS 14 campaigns on many accounts – because we want to get deterministic ROAS for as long as possible. While this may not be around for too long, it is available right now.

### 3. Persona and interest based creative pairing is making progress.

We are starting to see success with targeting creatives based on user personas, demographics and interests. While in the pre-iOS 14 world, Facebook's algorithm would basically pick creatives – and pair them to audiences. Now we're starting to see some progress with manually pairing creatives – say, creatives tailored to parents, or blue collar job seekers, or women aged 18-24 looking to save money.

### 4. Blended numbers still provide strong guidance.

While overall SKAdNetwork reporting is a mess at this point, we're still using the guardrails of blended CPAs and ROAS numbers right now – and in multiple instances we are seeing performance closer to bull case expectations than bear case expectations. More importantly we and the other stakeholders have confidence that we're able to trust the numbers and make decisions off them.

Overall, of course, it is still early days – and many problems do need to be addressed – but I hope this episode gives you an idea of the early lay of the land with Facebook ads, and the path forward.



## How will lookalikes and post-install event optimization work under ATT & SKAdNetwork?



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

As we know, the cohorted post-install events that we all know and are accustomed to will be replaced by conversion values that are not linked to individual users or install times.

Ad networks such as Facebook & Google will receive these conversion values without timestamps rather than individual postbacks for each completed event (revenue, level 50, free trials etc.)

Until this point, Facebook would build lookalikes based on a user's similarity to others who were in a seed list – based on their probability of completing events that users in the seed list had completed. So: if your users in the seed list were high value purchasers for your social casino game, Facebook would find other users that actually made high value purchases in other social casino games.

By the way, over the last few months, we've increasingly leaned into broad targeting on Facebook rather than lookalikes – especially on accounts with significant history. In essence, this has worked similar to lookalike targeting – if you were optimizing for purchases for your match 3 game in a broad or AAA campaign, Facebook would find other users that made high value purchases in other match 3 games.

So: what happens post ATT under SKAdNetwork?

Under SKAdNetwork, the algorithm won't know who has already made high value purchases in other comparable apps. BUT you can map events in your conversion value schema to standard events in your MMP for Facebook, Snap, TikTok and other platforms.

This is to say, your conversion events can be set up to be updated when an event fires in your app (say when a user completes a first purchase event, your conversion value becomes 3 or 011; and for a user completing a first purchase and then getting to level 40, your conversion value becomes 6 or 110).

This event is mapped to a standard event in Facebook – or every purchase (or for that matter non-purchase event) can be mapped to Facebook's standard event `fb_mobile_purchase`. This lets you optimize your Facebook campaign for purchases.

So: Facebook's algo is going to know and understand how many 'fb\_mobile\_purchase' events were fired for each campaign via SKAdNetwork – and which users were targeted by each campaign. It'll also know from its first party data as to which users saw ads, what their interests and demographics were, and which users engaged with the ads via clicks and video views.

With this, Facebook forms a probability of which users are likely to engage with which app – and this will let Facebook group users into lookalikes, or target users via purchase or post-install event optimization.

In many ways, this approach is similar to that of probabilistic attribution that we talked about in an earlier edition of this podcast. This is also similar to some of the post-cookie solutions that are being proposed in the web advertising world – which we will hopefully talk about in more detail soon.

Needless to say, this form of optimization and building lookalikes based on SKAdNetwork aggregate data is far less powerful than today's deterministic optimization and look-alike construction. That said, what is clear is that you will still be able to target event completers – and hopefully the platforms' ability to target and optimize for event completers will get better over time.

# ⚡ The power of attribution modeling to calculate LTVs in a post-IDFA world – with Chris Farm, Co-founder and CEO at Tenjin



Chris Farm,  
Co-founder and CEO at Tenjin.

[Check out the entire episode](#)

## There are still signals you can use

SKAdNetwork introduces the concept that there's no identifier any more that ties it to a specific campaign. But there are signals, for example, like postbacks that are sent to the ad networks that can be shared as raw data. And even signals like counts of postbacks that have come in, or sources of that information, can be helpful in modelling out how you would distribute or allocate the LTVs that you can still measure.

### How to use IDFV for attribution modelling

Let's say you see an IDFV come in today, and then we see 10 postbacks from a specific campaign for a specific conversion value come in, within a time period that's acceptable by Apple—that 24 to 48 hour window, post conversion value. So let's say that a conversion value 0 happens today, and then we see 10 conversion value 0s have happened within the next two days. A very simplistic argument for determining a probability might be that, that IDFV had a 1 in 10 chance that it's linked or matched to any of those IDFVs.

## Awareness is key

The recommendation is you have to have your eye on each type of model, and just the business in general. If you see sales go up in general, and you can correlate it to certain characteristics, it's helpful. And if not, then iterate on what the best solution is for you.

## It's important to choose the right model for your usecase

I would say—specific to, at least, our types of clients who are more on the gaming side and have much earlier LTV thresholds—you need a different type of modelling than mixed media modelling, simply because mixed media modelling takes too long. You're running these massive regressions and that requires lots of data to draw conclusions. That's why you need something in the middle between what IDFA was, and this mixed media modelling, incrementality type solution.

## A day in the life of an SKAdNetwork bid – with David Philippson, CEO and founder of Dataseat



David Philippson,  
CEO and founder of Dataseat

[Check out the entire episode](#)

## The new user experience is great

Whilst in the past there may have been a click redirect to Adjust, AppsFlyer, Kochava, etc. That is no longer happening. Actually the user experience looks pretty slick compared to days in the past: user clicks on the advert, and then the App Store on the iPhone just slickly moves up, so UX-wise is pretty slick. Click on the advert, App Store appears on their phone.

## How attribution will work on iOS 14

Let's assume that the user then downloads the advertiser app. The advertiser app's engineering team would have configured some code within it, some iOS 14 code which says: "Fetch attribution." What it actually is doing when the app first launches, it queries the StoreKit to say: "Who was the last click?"

## Be mindful of tracking events

Every time an event is tracked, the countdown timer is reset. This is the very reason why Facebook and other ad networks—we agree with them—are advising advertisers not to track in-app events for more than 24 hours for the first 24 hours. Why? Because every time you track an event, it resets the countdown timer. So the longer you're tracking in-app events for, the longer the delay is. Now I can't stress how detrimental delay is to advertising campaigns.

## What you DO get from SKAdNetwork

You get the region for free, because from the IP address, you'll know that it's USA, New York; you won't know it's downtown Manhattan, but you get some data for free, almost, from SKAdNetwork.

## The new role of MMPs

How ad networks will be judged, certainly in the short term I believe, will be: "Right you've driven 100 installs. How many conversion events, one, two, and three, have you driven?" Now for the MMPs to represent that, they actually need that granular data given to them; not just the weekly aggregate report sent to them. So it's the granular level data that will allow better understanding of a very limited new attribution system.

## The mechanics of info.plist

Each of the ad networks would have provided the supply side SDKs—MoPub and Google—with their signature. Now that signature goes into the ad-serving SDK, which actually puts each signature in the info.plist configuration file within that app. I'll give you an example. If a publisher, maybe SKA-compatible, and they may have five ad networks in their plist; that means that they will be able to track SKA for those four or five ad networks only. It is actually important that the supply side publishers are ensuring that their latest SDK from Fyber or MoPub or whatever, is the latest one, because the latest one will include all of the ad networks SKA signatures in the plist. So what the plist is is a list of registered demand side ad networks.

## 2 questions to ask when trying out a new DSP

For one of your audience members, who is thinking of running with a new DSP, they must ask them currently: what percentage of your traffic is SKA compatible? Which SSPs have implemented your signature in their plist? These two things are important now. In 6, 12 months time, it will be less so because everything will propagate.

## Publishers need to get SKAdNetwork compatible too

They have to make sure they've got the latest supply side SDK that includes those plists. As long as they've done that, then every ad impression they have, that is going through to the exchanges goes through to the demand side auctions, they will all appear as SKA compatible. And what does compatible mean in the bid request, we will just see an SKA parameter, which tells us that we can bid on it and that we are trackable.

## The current state of attribution affairs

The no man's land is, today, we've got a mix of SKA trackable, non SKA trackable, and we have multiple attribution methods. Today we've got IDFA matching, deterministic, you've got fingerprinting, and you've got SKA. This is why I call it no man's land, because we don't really know—we're using all three combinations today. What I strongly expect will happen—that we've discussed about in the past; you've probably seen articles for me—is that we strongly expect that fingerprinting will disappear pretty quickly after ATT rolls out. It is not this mix anymore. Very quickly, the whole world will become SKA only.

## What changes in the bid request

So what's the new norm? The bid request comes in. And the logic behind the demand side is going to be: "Right. What have we learned from our one advertiser for this one campaign?" And the type of things that you learn contextually is which publishers have the best conversion rates; what day of the week; what time of the day; which creative; what geography: is it Idaho, New York or California? So these are contextual variables. So what does change is that bidding logic, and within milliseconds, you get a bid request, within milliseconds, our algorithms will run, and my peers and competitors that have got this right will do the same. They'll go: "Right. Well, because this is this publisher on a Saturday at 8pm on WiFi, in New York, I'm willing to bid \$18." So it's the logic on the demand side that has changed. Not really the bid stream itself.

## Whoever controlled the data was the winner

What wasn't ever discussed was what's often in the fine print: whatever data is derived from using our platform, we are the data controller. That's legal language that says: "If you send me a suppression list, it's ours. We own it." And that is what led to the situation we're in.

## A way to estimate performance

My view on mobile web is advertisers should try and get as high an opt-in as possible. They should run on mobile web, they should fingerprint those users that have opted in, and then you extrapolate up. So let's just say, they're running a mobile web campaign, they have 20% opt-in, that leads to 100 installs. It is a completely fair statistical method to say: "Well, 20% lead to my 100 installs, therefore, 5x that, and that was my total performance."



## 🤔 Whatever happened to iOS 14 app clips? What Apple could have learned from playable ads



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

One of the features that got a lot of buzz in the last WWDC has been App Clips – it's a slick, polished mini-app experience that lets you 'test drive' an app's functionality (you could pay for a coffee or meal – or play a level of a game without having to go through the app download flow).

I can see how it's inspired by playable ads that over the last number of years have attained significant traction. These are also similar or comparable to Google's Instant Apps, that didn't go very far.

So: app clips are a very slick – and convenient experience, in theory.

In practice, there have been a number of challenges – the primary among them can be described in a single word: discoverability.

App clips are an incredibly cool experience – but they are not helpful if you can't discover them. For a marketer this is a huge deal. The primary ways that you can invoke app clips

1. NFC tags or QR codes when you are outdoors (say at a coffee shop, or restaurant or near a rentable scooter). I'm not sure if there is going to be a significant portion of your potential new users that are ready for 'impulse' purchases or use like these cases.

2. A smart banner in Safari. So: this can work if you are already in Safari – and maybe a small portion of users will click on them.

3. As a link in iMessage (but not elsewhere). This perplexes me. If you send a link to an app clip in iMessage, the recipient can click and open the app clip card immediately.

As a developer, you can't develop just the App Clip – you still have to develop a full app – and yes: you still have to get it reviewed by Apple, and yes: if your users make a purchase through it, you still have to pay Apple 30%.

And yes: app clips aren't easily attributable – you can't attribute them with SKAdNetwork.

In summary, yes, this could be useful for apps with significant outdoor presence that can benefit from NFC tags/QR code based flows – or for apps whose new users go via Safari, but to my knowledge, very few developers have made app clip experiences.

It's a shame that such a slick experience has seen not a lot of adoption. How could this have been improved? What could Apple have done differently?

One direction I'd recommend would have been the direction that playable ads took in games – and really, you could argue that playable ads are a predecessor of app clips in many ways. If Apple would let app clips be linked to by games – or products within ads (or heck, even their email newsletters in a seamless manner), they'd be far far more accessible.

The success of playable ads over the last many years offers helpful pointers to what could have been.

But for now, for want of distribution, an amazing product will probably slide into oblivion – or simply stay on the backburner for consumers and developers alike.

## More than just conversion values: how to make the most of your SKAdNetwork data – with Paul Bowen, GM at AlgoLift by Vungle



Paul Bowen,  
GM at AlgoLift by Vungle

[Check out the entire episode](#)

### The importance of day zero monetization

If you can just differentiate between non-payers and payers on day zero, then you're already in a good place to understand which users are going to be high value and which are not.

It becomes a lot more challenging when you're talking about apps that have no monetization on day zero, or even within the first week. A good example of that might be a subscription app, where you have a free trial and you spend seven days enjoying the app for free before you're rolled into a subscription. It's a lot more challenging there to understand what the future LTV of a user is, because the best predictor of LTV is past spending behavior and past revenue behavior.

### Alternative way to predict LTV

When you have no revenue events early in the user's behavior, you're going to have to use engagement events and use those to predict LTV.

### How long is too long for campaign feedback

You can wait seven days. The challenge is: is it worth you waiting seven days plus another day—actually eight days before you get that value back? Is it worth eight days after an install has happened to find out how well that install performs? For most performance marketers, that's just too long.

## What developers think about a 24-hour attribution window

Some developers have said to me: "We're actually just gonna wait a longer amount of time to send back the conversion value to Facebook. So we know that they want that within 24 hours, but it's just not long enough for us to get a good indication of the user quality and therefore the campaign quality. So we're gonna wait three days to do that." And I think there's gonna be some experimentation as to whether that impacts campaign performance and the ability of the ad network to optimize, but if it gives the performance marketer a better indication of what's working and what's not, that may be an okay trade off for them to make.

## Why some developers may skip MMPs

Some of the largest developers are speaking to some of the larger ad networks about: "So rather than using an MMP, can I get access to these postbacks then myself? Then I can define and manage the conversion value without going through a mobile measurement partner." Some of the bigger companies might choose to go that route.

## This isn't a good time to break up with an MMP

I would encourage all developers to work with their MMP today. I think there's too much uncertainty and you want strong partners at this point in time with all the turbulence going on, so I would encourage all developers to work with their MMP.

## How to use probabilistic attribution for SKAdNetwork

Probabilistic attribution is the idea that you try to map installs into your application back to those campaigns that are driving specific conversion values.

So essentially, what you're trying to do is create a probability that every install into your application came from a specific campaign. And you do that because you're looking at the conversion values of a user. So the two data sets you need to do this are your app data and the SKAdNetwork data.

## Limitations of probabilistic attribution

The limitation with the probabilistic attribution model is that you would be limited in terms of reporting maybe a D1 to D3 ROAS. I think the question is, how do you then extrapolate that to a D365 or a D180 ROAS. So the probabilistic attribution model isn't that challenging. The challenge is how do I then extrapolate that to longer term returns from this specific campaign. Because in this new paradigm, we don't know how these ad networks are going to be able to optimize. It's likely that their ability to, for example, find whales is going to be severely diminished. So the LTV curve is going to look very differently than it did before.

## The curious case of Facebook's 128 install recommendation: how to address SKAdNetwork's privacy threshold limitations ✨



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

Facebook has recommended setting up campaigns so that you hit at least 128 installs a day, so that these campaigns can overcome Apple's privacy thresholds and you can actually see conversion values.

For many smaller advertisers, 128 installs a day per campaign can be expensive and risky. However, we were able to test this with some of the larger advertisers that we work with. We asked – does hitting 128 installs a day solve all your problems? Do you then see all conversions, at least as reported by SKAdNetwork?

The answer is disappointing.

Yes, getting to 128 installs a day did make a difference. A number of campaigns that had zero conversion values started to see non-zero conversions. However, these conversions were still so few that they just weren't meaningful to draw performance conclusions from.

For instance, on a couple of accounts we saw thousands of dollars in spend with 2 or 3 purchase conversions, which was very poor compared to their erstwhile day 0 CPuP of \$150 or so. (And we did benchmark SKAdNetwork reported performance metrics against day 0 metrics from the past – to allow for the signal loss due to Apple's system of timers.)

This makes it extremely difficult to evaluate performance. Especially, if you are required to commit to hitting 128 installs a day and spend thousands on a campaign, only to fly blind.

What makes this even more curious is that this privacy threshold is NOT a problem on other SANs or ad networks. On Snap, TikTok, and ad networks, we do see the cost per unique payer (or cost per conversion) to be comparable to the erstwhile day 0 cost per conversion. It appears that there is not a lot of performance degradation on these platforms as compared to Facebook.

What gives? Why is Facebook measurement seemingly broken?

Here is our strongest hypothesis. As we've spoken about in our workshop [Mobile Growth Lab](#) because Facebook has limited advertisers to 9 campaigns per account, Facebook is likely setting up campaigns 'under the hood' that it is dynamically using for creative testing and iteration. By dynamically setting up these black-box campaigns and using them behind the scenes, Facebook can stay under Apple's required 100 campaign limit, while exposing only 9 campaigns to advertisers.

If the 9 advertiser-facing campaigns are actually 100 Apple-facing campaigns, then each advertiser-facing campaign will need to hit 11 times as many installs and conversions as an Apple-facing campaign.

What we hypothesize is that ad networks and other SANs such as Snap and TikTok right now have their advertiser-facing campaigns to be similar to Apple-facing campaigns. As a result, conversion values on ad networks and other SANs are obfuscated far less than Facebook's are.

Given that Facebook's conversion tracking is not even directionally accurate, these are some of the things we recommend:

a. Treat your other SAN and ad network performance metrics as close to accurate (as comparable to do CPAs).

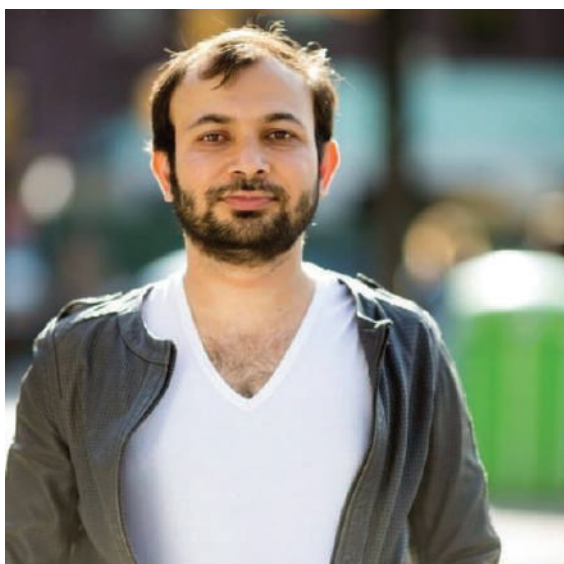
b. On Facebook, optimize for installs for now – and target getting to the lowest cost installs, so you have at least some confidence in the numbers that you are seeing. Don't compare Facebook reported SKAdNetwork metrics vs. other channels – because these are not comparable.

c. As we've said before, lean on blended numbers as your source of truth.

These aren't perfect solutions – because we aren't living in a perfect world just now, especially with the broken measurement post iOS 14.5.

BUT I hope this episode helps you understand that scaling to 128 installs a day per campaign isn't the only path forward – if anything, that is a very risky path. I'd recommend looking at your other options to get as much visibility and transparency as possible under the circumstances.

## 👍 What's working now post ATT/iOS 14.5 in mobile user acquisition: 6 opportunities to address performance deterioration



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

Many advertisers are continuing to see challenges with their performance right now as the actual impact of traffic without user-level data is becoming increasingly visible. Yet, there are some strategies and opportunities available still.

Based on our review of 15+ accounts across verticals and different budget levels, we see some elements that are common to accounts that are relatively happy with where they are now – that we recommend to folks looking to ameliorate their recent performance issues.

So: without further ado, here you go on our top 6 recommendations for advertisers looking to combat performance deterioration.

### 1. Use blended metrics as a source of truth

Measurement is unfortunately broken across channels, so we're using blended CPAs as the primary north star. We use channel wise CPI and CPA(when available) as directional measures of performance. For many advertisers, we see their metrics are far less alarming than what they'd be if they looked at campaign level metrics that have been obfuscated by privacy thresholds.

## 2. Optimize for installs(or upstream events) on FB.

One reason campaign level CPAs have looked very wonky has been that what events are sent to Facebook are obfuscated by Apple's privacy thresholds. Plus: if the event stream is far weaker, so is the optimization done by the platforms. Put simply, if you aren't sending enough purchases to Facebook, and if Facebook has weaker signals on people making purchases, Facebook is going to have a harder time finding new purchasers.

We're seeing that install optimized campaigns, especially on Facebook, have a stronger performance(based on pre-post tests – and their impact on blended metrics). When possible, other upstream events like registrations or tutorials complete have been working well too.

## 3. Consolidate AEO campaigns (and skip VO)

Due to the factors I talked about earlier, the event feedback loop has deteriorated significantly – and AEO/VO campaigns have been hit by this, especially for apps that have low purchase volumes(or high CPA/low payer percentages).

Facebook's recent guidance has been to set up campaigns so you get at least 128 installs per day. For smaller advertisers that means leaning primarily on install optimization(as indicated above) – but for larger ones, we recommend consolidating AEO campaigns so you can hit or approach the 128 installs a day threshold.

And VO is generally not working at all – understandably because this can work best with revenue based events, which can work in theory if you have conversion schemas that include revenues/purchases, but in practice because purchase events tend to be less frequent, we see VO campaigns not working at all.

## 4. Lean in to other SANs

We're seeing Snap, Apple Search and TikTok have lesser volatility. We see CPIs – and SKAdNetwork reported CPAs for Snap and TikTok that are more stable and competitive. While this effect is way stronger for non-gaming apps, we do see this performance for games as well.

## 5. Web flows

We're seeing competitive performance on apps that have been running web flows.

We see a couple of flows that are working well(in the order of complexity of setup):

Ad ➔ landing page(with smartlink) ➔ app store[optimizes for leads, or clicks on smartlink]

Ad ➔ landing page with phone number collection ➔ users get text messages upon signup with smartlink to download[optimizes for leads, or filling out form with text message]

Ad ➔ article/content page(with smartlink) ➔ app store[optimizes for leads, or clicks on smartlink]

Ad ➔ web onboarding (this obvi will take more resourcing to setup) [optimizes for web conversion].



## 6. Ad networks/DSPs outside of SAN (at larger budgets):

For some folks we work with that have large budgets(6 figures) + have diversified outside of SANs, we are seeing strong performance on ad networks & DSPs. I don't recommend this at small budgets, because this does take budgets and time to optimize and get right(also: these typically require a fair amount of manual optimization to be performant) – for reasons I describe here: [Why you shouldn't diversify your user acquisition mix early on](#) 📱 – Mobile User Acquisition Show (tldr: start exploring ad networks/DSPs at high 5 figures or low 6 figures in spend).

While traditionally ad networks/DSPs have had stronger performance for games, we are seeing them do well for subscription/lifestyle apps as well lately.

Again: I'd underscore that when I say acquisition is 'working' for some folks, that is a relative term – simply because a lot of granular metrics are broken, but for a number of advertisers we work with, there is some optimism on account of the above, and the above are some strategies we recommend for advertisers that are looking to ameliorate their immediate risk.

## How to make compound/synthetic conversion value schemas work in SKAdNetwork



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

Many developers we know have used or considered using highly specific or customized conversion schemas for SKAdNetwork.

One example is of an ad monetized app that has used a conversion schema that has higher conversion values based on ad revenue (which can be different based on ad placements or geos). Another example has been a synthetic event which is triggered when a user completes a sequence of steps as determined by their data scientists to be predictive of eventual LTVs.

The reasoning behind this is understandable – higher conversion values are directly correlated with high LTVs, so these approaches clearly allow for a campaign's performance to be estimated and compared with another's.

There can be challenges with these approaches though, which we recommend carefully thinking through. Here is how.

Conversion schemas have two functions – one, to measure the value of a user, which these approaches can successfully do. The other, which they aren't as great at doing – is to provide a signal to platforms so that they can optimize the campaigns.

Platforms such as Facebook, Snap, Google and TikTok all require you to map events to standard events such as purchase, registration, add to cart, add to wishlist etc. – so that they can optimize for the best cost per purchase, cost per add to cart etc.

With synthetic events or compound events, it becomes critical to map them to a standard event – so that platforms can optimize for these events. Moreover, when you are defining these events, you also want to ideally map your conversion values to multiple standard events in platforms – so that you have a setup that is as close to a funnel as possible (say: register, add to cart, purchase etc.) – so that you have as much clarity as possible within the platform interfaces around how deep in the 'funnel' a user has gone, which in turn signifies how valuable a user is.

Yes, of course, you could map all your synthetic or compound events to a single event (say purchase) – and there are times we've seen this make sense. However ideally to have as granular a view into different value levels of users, you want to have a gradation of multiple events so that you have as clear a view of user values as possible.



# STRATEGY

## How to use structured TGIFs to build a 100 million download game from scratch – with Sheetal Bairamadgi, Founder at Crikey Games



Sheetal Bairamadgi,  
Founder at Crikey Games

[Check out the entire episode](#)

## How Sheetal adapted to the gaming atmosphere

I wanted to know the other side, how does game development work? We can have an idea, but how does it actually come into action? And what are the level designs? What does the game design document look like? All these things, I've learned over the past couple of years.

## Structuring Fridays to focus on ideation

We list the top 10 games that the team likes and every Friday evening we have a session where everybody comes up with a game. And they have to tell us why they like the game, and how we can use certain elements in our games. Those ideation sessions definitely help because it gives you exposure to the outside world, other studios and what's trending right now.

## Playing games in order to develop games

Once they say this is the game that I'm talking about everybody downloads and plays the game on the fly. While the person is talking, everybody is actually playing the game – so we're all on the same page, talking about that particular game and why it interests them. What did they like about the game? Sometimes it's about the color scheme. Somebody might say "It's very light", somebody else might say, "It's very bright to the eyes". They also need to make further decisions saying, "Okay, how can we implement that into any of our games using the same mechanics or taking that as our inspiration?"

## Why there's emphasis on an all hands meeting

You never know where the concept comes from. And I think that is very important. The concept need not come from a game designer, myself or the stakeholders, it can come from anywhere. And I think that's where the gaming studios need to work closely. The game developer need not just work on the coding, he can be a part of the ideation sessions. And I think that's been my process from the beginning and it helped.

## The evolution of the game development process

How do you build content? How do you progress? People get really bored with hypercasual games if it's repetitive. You need to give out a few things, every few levels. So I guess that was the learning process for us. The first prototype that we did, we didn't have all those. As we progressed we found out, you can get the CPI right, you can get the retention right but the CPI is actually related to the creatives that you run. So the first thing that you have to get is the creatives, the higher the CTR, the lower the CPI. So those were the things that were part of our learning process.

## The inspiration behind the game Phone Case DIY

While we were working with our prototypes, one of the prototypes that we were ideating was a phone case. The idea simply came from one of the YouTube videos that we were briefly looking at. It was a huge trend back then in the market where teenagers usually wanted to dress up with their phone case, especially the Asian audiences that we were targeting. There's a video of the game on YouTube. And I put it on my Slack channel, saying, "Guys, what do you think about this idea?" and everybody got super excited. And then we started researching about it. And there were a lot of videos around this but there was no game.

And then we went back to the drawing board on one of our ideation sessions, I think we spent almost a week on just ideation.

## How the audience responded to the game

The game became hugely profitable on iOS in month one or two, and then we launched Android earlier this year. And we hit like a 10 million download mark in eight days. A huge achievement for us. And we were like the number one game in 52 countries. It was amazing. And the best part was we were such a small studio.

## The anatomy of a breakout launch: learnings from Project Makeover – with Jerome Turnbull, VP of Growth at AppLovin **100**



Jerome Turnbull,  
VP of Growth at AppLovin

[Check out the entire episode](#)

### Different targets for different genres

The way that we look at it is what is the breakeven target for these titles? A hypercasual game will tend to have a breakeven of maybe a couple of days or up to a week. The casual games, the more successful ones have a longer tail, you could be looking at a year's time for a breakeven.

### Why Project Makeover's hit creatives resonate

The tagline for the game is to give makeovers to help people achieve their dreams. And so that's kind of fun, or could be a comical experience having a makeover and one approach that we've explored, is testing a win or a fail motive. So the win motive is if you have a successful makeover, and the person can achieve their dream, and then maybe the fail is they're not at that point yet, then there's some comedy that can come in. Those get people's attention, make them laugh, and drive interest in the game.

## Did Apple's privacy policy changes impact Project Makeover's launch?

One thing I agree with is that user behavior hasn't changed. It's really just a measurement, or measurement challenge that's new. So there's some historical precedent that you can lean on. What did monetization or what did user behavior look like in the pre-ATT world? I don't think that's changed too much. There are also ways to lean on data sets from the small subset of consenting users on iOS to make decisions. What I would note is that – this is not so much for Project Makeover but for other titles, ad monetization, or the ad ARPIs on iOS have taken a hit.

## The team structure at Applovin

We've structured our teams around the game category or type. And that's because we see that there are learnings that are more scalable and relevant there. Other structures have been channel specific. That's how we operated at Machine Zone, before we joined Applovin. That's because there were fewer titles. And we saw that this specialty has a very channel specific focus, but we do it by categories. So we'll have a match category, they have insights from other match games that they've worked on. And our team will manage some part of the UA, whereas the studio will have their own in-house UA team.



## How to build a hit developer-facing product – with Aurora Klæboe Berg, COO at Medal TV



Aurora Klæboe Berg,  
COO at Medal TV

[Check out the entire episode](#)

### Make the sharing experience enjoyable

For Fun Run, it was more around all the funny moments that happen when you're playing with friends, like moments where you're pulling a friend back with a magnet right before you're crossing the finish line. In the Adult Coloring Book for instance, sharing just a screenshot of the final moment is not as unique as sharing the time lapse of you actually constructing that drawing.

### Don't expect your users to go through multiple steps of promoting your product

The user needs to say – I want to record something and then they say- I want to stop whatever is happening and now I want to share this potentially multiple megabit file through a social network. And there are so many steps, as well as places along the way where the user would drop. We thought- our game is so cool, there needs to be a better way. And so we knew we needed to differentiate from that. What came out of that was that we focused on only sharing highlights and making it as easy as possible to share those highlights. I read a study a while ago that people's attention span on mobile is like eight seconds. And so we kept the recordings to 15 seconds, and our default is five.

## Show them what to do

A story I like to tell when I get a question like that is back in 2014-2015, when I was still with Dirtybit we had this big game studio that was building an ad network at the time, approach us and tell us about this concept of rewarded video ads. At the time, we only had rewarded video ads hidden in a challenge scene, just like a lot of challenges you had to complete, 20 coins for watching a video. And they told us- if you move this rewarded video to within the game loop, you're actually going to monetize way better. We were still reluctant because we were so scared of the impact on retention. They showed us numbers, but we were still reluctant. They eventually flew to our office and showed us exactly where to prompt the user, how to prompt the user, and all of that, and we implemented the changes we were convinced to try. And after that we did a case study with Chartboost, which was now like 50-50, split on revenue from in-app purchases versus ads. We came to a 15-85 split. It was really huge.

### Clarity in communication to users is vital

Whenever we found bigger developers that we wanted to work with, we made similar dissections to explain exactly how to communicate it. It's all about how do you communicate to the user that this is first and foremost, a value add for them? And how do you make it as easy as possible for them to follow through? We've also done a lot of content marketing on that.

## Overcoming SDK fatigue

On the SDK fatigue, we tried to speak to developers, we tried to structure things in a way so that it would be easy for a developer to go through our docs and be like, "Huh, I wonder how much time this will take me". And then like an hour later, it would be integrated, it would be a prototype that they could show their team and say, "Hey, what do you think? Should we integrate it deeper and really communicate everything in a good way to our users?" So we spent a lot of time on our documentation and making that as simple as possible.

## The misconception of virality

Virality won't fix a broken game. Unfortunately, a lot of the developers we're working with come to us, and say "this will be great, people want to share the content, because my game is so great." And then the game isn't necessarily as great as they hoped. I try to be candid, where I can. Obviously, I shouldn't kill anyone's dream. But I try to help and try to address the core game first.

## The need for clear steps to a referral flow

Why this is beneficial for them, how they're going to do this, in the case of a referral, getting the reward, because the thing about the referrals is that it's not just about the sharing, someone needs to be on the recipient side, and follow through on their end. And so if you as a user think that "Well, my friend said they'd click the link, I should get the reward," then that isn't usually what would need to be done. Your friend needs to actually click the link, open the app and trigger the SDK call on the other end, for the rewards to come. And so there's frustration among users if they don't understand that, which is hard to educate.

## What is Feature Engagement?

We talk about feature engagement, which is when someone is playing a game, and they see the share capabilities, and they hit share. That's feature engagement. Second is share ratio, which is you're hitting that share button, or you're actually hitting a destination or tapping into destinations to share to. And the third is install ratio, which is when someone is actually sharing and a friend starts to play.

## Why your Install Ratio will never be 100%

The last one, which is usually what people are most focused on, is install ratio. That is someone selecting a share destination and a friend actually going into play. And a few reasons for this also not being 100% is that there's so much that can go wrong in the communications with our friends. There are also share destinations that don't allow you to have a link. So you can't actually correctly attribute this install. And there might also be that the reward isn't enticing for the sender to properly follow through on having your friend join.

## Private messaging apps vs. public forums

Another thing is how dominant private messaging apps are for this is still surprising. Because it's something that I keep having to educate developers on. I think everyone still would very much like to go viral in a public space like Twitter. But now it's more close knit communities. When I say private messaging, it's not necessary just one-to-one, a group of friends on WhatsApp or even a Discord community can be a shared destination.

## Zero to category-leading: how habit formation can fast-forward subscription growth in an uncharted genre – with Govind Balakrishnan, CEO and Co-Founder of Curio Labs



Govind Balakrishnan,  
CEO and Co-Founder of Curio Labs

[Check out the entire episode](#)

### User engagement on audio is unique

We felt strongly that the visual medium was so optimized for superficial consumption and short attention spans that there was an innate need in people and a desire in people to go deeper and build meaningful connections. That is something we've seen at Curio; people listen to us for often 45 minutes per session, which is perhaps about 10-20 times what people spend on a newspaper or a magazine.

### We started with user motivation

The thing that we realized was that there was a huge pent-up demand in people for self development and for inspiration. We said, you know what, journalism—not daily news but really good thoughtful journalism—is a real engine to convert into opportunities for self development and inspiration.

### One of the ways Curio was inspired

One of the inspirations for us was actually a quote which Apple used from Alan Kay, in which he says: "Those who are serious about software, make their own hardware." And those who are serious about content, create their own experiences.

## The different types of engagement

With people, particularly when it comes to audio, there's active and passive engagement, but there's also time shifting that happens. When people choose what to listen to is not when people listen.

## Product users are the best advocates

Our evangelists—our investors, subscribers, Apple, everyone—have fundamentally come back to them being users of the product, and whether the product itself has added a lot of value to their life. Even amongst the people we speak to at Apple, even when we were very small, a lot of them used the product actually, and got a lot of value out of it. Even though we were small—just two people sitting in a basement in London—the fact is that people used the product; even some of our investors.

## Users prefer honesty

Quite early on, we had a very traditional flow: You would sign up to the app, and then you would get shown a subscription pop-up at some point. One of the things that we did was, we delayed the subscription pop-up. We said: "Ok, you know what? Just sign up, come in, check out the product, and then the subscription pop up comes up." Essentially, our conversions fell by about 40%, because it was much more preferable to actually be upfront and straight with people about subscriptions.

## The non-obvious signals for habit formation

We were talking to one of our investors, who worked at YouTube in the early days, and he was saying that early on in YouTube, the point of activation was getting people to watch videos. But as the audience started developing, people started growing, and you started broadening out the base, watching an entire video was quite a high barrier for people. Whereas subscribing to a channel, for example, was a much easier, lower commitment, yet signaling habit formation. I think that is a great example of how when we are thinking of hard activation, which is to say, habit formation—obviously, listening to the tracks is the best form of hard activation, but there might be other signals as well.

## Multiple pathways to hard activation

Someone might say: "You know what? I want to test this product. I'm going to make sure I build a habit, then I'll pay for it." And there's a pathway for that. But equally, people might say: "You know what? I want to project this future for myself, and I want to take the chance and I will find my way to get there." Both of these happen, and it's not just for us.

## Insights are surfaced through constant experimentation

We are testing out quite a bit in terms of premium features: Are there softer points? Is the best free thing to give, tracks? Is it actually that you might be able to add things to a queue, or you might be able to time shift? How valuable is time shifting versus listening now? Things like that.

## The dimensions of content

We think of content across three dimensions which are: global content that can travel globally; local content that can travel locally; and local content that can travel globally.

 **Playing in style: how gaming & fashion are becoming increasingly intertwined – with Joanna frota Kurkowska, Digital Insights Analyst at G2A.com** 



Joanna frota Kurkowska,  
Digital Insights Analyst at G2A.com

[Check out the entire episode](#)

## When people's lives shifted online

Their digital personas go out more than their physical selves. I don't recall any moment in history that this happened.

## The value of an asset is conceptual

When I talk with my friends, they're always: "I wouldn't buy a digital dress or skin for even a couple of hundred dollars!" Then I'm telling them: "But you bought some Nikes, Reeboks or Pumas, or other famous brands for a couple of hundred dollars." "Yeah, but they're physical!" And I say: "Okay but the production cost of this shoe is \$5, \$10 or \$20, right?"

## The unexplored potential of gaming spaces

I think many people are dissatisfied with social media, Facebook, Twitter, and they're looking for new places to meet people. I think gaming as a social service, gaming as social platforms is the way to go there.

## How gaming incorporates fashion

When it's a game that should be a social platform in its core design and from this core design that we talk over, ask more questions and add more notes. For example, are we going to do fashion - street style, elegant, glamour or boho? What's our core audience? Are there any niches that have not been covered?

There is for example this game, I think it's called Fashion Police. It looks like Quake, Doom or Duke Nukem. Instead of shooting people, you shoot something and it changes the dress of the person.

### There was no online gaming in the beginning.

It's funny because when I talk with kids that are around 8, I show them, for example, Super Nintendo games. They are like: "You said you couldn't play online?!" I think the younger generation doesn't see the possibility of not playing online, in spite of the fact that, for example, on PlayStation, you have the trophy system.



## How to win with offline marketing for a mobile app – with Adam Hadi, VP of Marketing at Current 🏆



Adam Hadi,  
VP of Marketing at Current

[Check out the entire episode](#)

## Why customer trust is critical

If you're living paycheck to paycheck, and I'm over here asking for your paycheck, what I'm literally doing is asking for all your money. Which is a huge ask, because if that doesn't work, you're in trouble. That means you're not eating; you can't get groceries. It's not like you're in a position where you are: "Oh, well I'll just dip into these funds or use this card or that card."

## Consideration phases vary across genres

The consideration phase to download a bouncing ball app is about three seconds: "Ooh, that looks fun." and then you do it. No one's ever seen an ad for a hyper casual game and then searched for it three weeks later, and been like: "Yeah, that's what I want right now."

On the spectrum of customer behaviour, something like a hypercasual game is hyper direct response. Something like a bank account is somewhere in the middle of that spectrum, where direct response is obviously important, but not the only thing that matters. On the other end of the spectrum, it's probably something like dishwasher detergent. No one's ever seen an ad for Cascade pods, and then was like: "Yeah, I got to do this right now!"

## The consumer journey is layered and complex

There is a European fintech, who entered the US market with a huge splash—a huge out-of-home splash. If you were in New York, the summer before, they were everywhere. They were there across bus stations, billboards, everything.

And so that was a little bit of an experiment, in some form of how did that do. Even just looking at the App Store, it didn't move the needle at all. Now, one conclusion from that would be: "Oh, well, out-of-home doesn't work." But I think that will be the false conclusion from that. A conclusion from that is out-of-home doesn't work, if people have no idea what your product is, or what your brand is, or anything else.

## The impetus to move offline

When we've talked with our customers, over and over again, the conversation always came around to trust. And for us, that's a really challenging conversation, because I can sit here and talk badly about Wells Fargo all day, but they've been around for 100 years. They have a retail location around the corner from you, where you can go and talk to real people. There's trust there that would be very difficult for a company like ours, which is just a few years old, to try to rival. And so that's always been a challenge for us. So our question is, well, how do you fast-track that trust?

## How to validate offline marketing activities

We use a mobile attribution provider—that shouldn't come as a surprise—for our digital stuff. But you move beyond that, and we have a 'How did you hear about us?' That's also fairly standard. It is a fun hobby of mine to compare those two; I think it tells you a lot. In my opinion, both of these tell you a piece of the puzzle, and then you look at uplift. You have uplift by region, you have uplift by time—both of those exist. There's pretty well built up models for TV, a linear TV, at least when it comes to time based uplift.

But actually the most obvious examples for us come with influencers. You have some big YouTuber who puts out a video and gets millions of views in a matter of hours. It's not hard to see the difference between what you get attributed and what you don't. Again, the numbers are just so big and so fast, and in a space like that, but that same principle, again, applies to other offline channels.

## There is some difference between attribution and reality

You'll say, 'how did you hear about this'—Well, I heard about it on Facebook. But that's different from 'Why did you download it?', 'Why did you sign up?' 'Why did you convert?' And that could be because of our marketing—it could be part of marketing—or it could be because my friend told me or my grandma told me or my sister told me. Or I, again, had heard about it on Facebook, and then it was some separate event that actually made me then go and search for it, click the Google ad and download the thing. So there's all these complex paths that people take. So be able to compare on the user level, your survey response along with your attribution, kind of combine that with the stories that your customers actually tell. And I think you can come up with interesting narratives, which again, do a better job of reflecting reality.

## How web privacy changes and tracking prevention are shaping the future of web advertising – with Allison Schiff, Senior Editor at AdExchanger



Allison Schiff,  
Senior Editor at AdExchanger

[Check out the entire episode](#)

## Apple's Intelligent Tracking Prevention

Apple started rolling it out in 2017, as part of WebKit. And the aim is to prevent cross-site tracking by putting limits on how first party cookies function. So Apple uses machine learning algorithms to section off any first party cookies that have tracking capabilities, and puts a timer on how long they're viable.

The original version of ITP made it so that a site only tracks a user for 24 hours after a visit. If that person didn't visit again, for 30 days, they'd get purged. Then companies tried to get around that by doing funky redirects. And then Apple got hip to that, so they got rid of the 24-hour grace period for tracking and measurement. And then Facebook came out with a workaround, which was a first party cookie option for its tracking pixel. So then ITP 2.1, started to require consent to drop cookies, etc, etc, all the way up to March of this year when Apple came out and just said, "We're going to crack down on any attempt to work around ITP."

## The difference between ITP and ETP

Unlike ITP—because they use machine learning to detect tracking cookies—Firefox uses a list of known trackers to block scripts by default. And that's everything from cross-site tracking cookies to the cryptominers.

## What are second party cookies?

Second party cookies, like second party data, they're just transferred from one company to another through some sort of data partnership.

## Privacy isn't at the cost of UX

There really aren't workarounds. There's nothing you can do to get around the intention of something like an ITP. But I believe that there are some carve outs in Safari where they will allow someone to remain in the logged in state when there's consent. Stuff like that, where the user experience doesn't have to be affected just because of all of this stuff going on in the background like tracking cookies.

### What happened when Safari implemented ITP

When personalised advertising doesn't work as well in certain environments, revenue is going to go down. But I don't think there was a massive dip in revenue for publishers after Safari really got started with ITP. Because the browser share is so small. I mean, you could argue it should have been writing on the wall, and I do think that some publishers started to think about their first party data strategies as that started to happen. But a lot of other publishers just sort of shrugged their shoulders, and put their head in the sand.

## A mad scramble for alternatives

With ad tech vendors, everyone and their mother is coming out with some sort of cookieless solution. My inbox is absolutely jammed with pitches about cookieless solutions from everybody.

## Privacy changes and programmatic

I do think programmatic advertising is going to be really affected. The programmatic ecosystem is really reliant on cookies, especially third party cookies, for everything from personalization, audience creation, targeting, retargeting, measurement and analytics. And so they really do need to find some sort of alternate way to target ads and personalised campaigns, but on the open web.

## The disconnect between publishers and their audience

Middlemen, ad tech vendors just stepped in and sold the promise of programmatic, and then made the supply chain into the muddy mess that it is today. And so publisher sites are stuffed with third party tags, and some publishers don't even know which tags are on their site. Data is leaking everywhere.

When third party data goes away, first party data will rise in value. And so some publishers have a head start. Like I was saying, they started to develop their first party data assets when Safari started making its moves back in 2017.

## 2021: The year of identity

You know how everyone was constantly talking about the year of mobile? I think we might be entering a year of identity. But I think that 2021 actually is and has to be, because there is the deadline of 2022 that Google has set for deprecating third party cookies in Chrome.

## 💡 How PuzzleSocial Grew UA Spend From Zero to \$1.5 Million per Month (and got acquired by Zynga) 💰



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

“We should spend zero dollars for now.” I went to the whiteboard and wrote the number “0.” We were trying to figure out how much we should spend on our user acquisition initiatives. I recommended that we not grow at all.

In the spring of 2015, I joined a small app developer called PuzzleSocial as the Director of Growth. Our team was just five full-time people including me, and a couple of contractors. Our DAU numbers were small compared to the bigger games that I had worked on in the past.

My mandate was to help grow and scale the game, but here I was, recommending that we actually not spend on growing the app.

That was intentional. We eventually ended up spending – and increasing our spend from 0 to \$1.5 million per month. Consequently, we grew our daily active users 7x in under a year – a trajectory that resulted in our acquisition by Zynga.

It was a lot of trial-and-error before we made it work. Here are some of the key strategies that were successful for us.

### 1. Nail retention before thinking of user acquisition

As you can imagine, the decision not to spend and grow was hard for me as the new Director of Growth. Yet I knew it was the right thing to do.

Our retention wasn't quite there, and we didn't know if our ad spend would come back in its entirety. But we were confident that after we nailed the retention piece, we would get to a point of sustainable economics and spend money with confidence.

## 2. Measure what truly matters

After we improved our retention, we opened up our acquisition efforts. Still, we knew we had to spend responsibly. We had an LTV model that would tell us whether we were making our money back.

At the same time, LTVs and CPIs would be meaningless if we had no cash in the bank. We had to tread carefully because LTVs represent revenues that would accrue over a 12-month period – and we would have to keep track of the metrics that ensured our short and long-term financial sustainability.

Other than LTV and CPI, we obsessed over the following metrics:

- **Retention.** We made sure to acquire only high-retention users. We had built a high-retaining game, and we wanted to make sure our users experienced it fully. This meant saying “no” to incentivized traffic, cheap traffic or geo’s that wouldn’t necessarily work long-term.
- **DAU and revenue growth.** We looked at our high-level metrics every day and asked ourselves, “are our user acquisition efforts driving DAU growth and revenue growth?” As we saw our DAU and revenue curves slowly trend upwards, we became more comfortable spending and investing in our user acquisition activity. Then, we gradually ramped our spending up from zero to five figures, six figures and then seven figures per month.
- **Cashflow.** Especially in our early days, we kept an eagle eye on our cash. As a small company, we couldn’t risk coming close to running out of cash. Once we built up enough of a revenue cushion, this pressure diminished, but without a doubt, cashflow was a key determinant of how much we were willing to spend.

## 3. Test quickly and double down on what works

As we grew our user acquisition efforts, we tested channels quickly and aggressively. In the beginning, we started with three core channels while separately running one or two small-scale experimental channels at a time. When we began to see consistently strong performance from a new channel we tested, we would immediately double down on it. We spent our effort and time on creatives, analytics, strategy and planning, and increased our investment in the new channels to make them work. This was how we scaled our UA spend on Liftoff to over \$200k per month.

## 4. Diversify across multiple formats

Still, we needed to spend responsibly. Just because we were starting to see revenue growth, we couldn’t take our foot off the pedal. We still looked at our revenue and DAU charts daily, and kept moving up and to the right. We expanded to newer user acquisition channels, making sure we were investing in all ad formats – videos, social, search, playable and display – and tailored our strategy for each format. As we slowly opened up our channel mix, our DAUs and revenues increased. We grew our spending to \$1.5 million per month, had 15 UA partners in our acquisition mix and were acquired in 2016.

If you have a strong product with the potential to scale and grow, I hope you’ll find some of the above strategies helpful in informing your own user acquisition strategy.

## ✂ 4 challenges of MMM based incrementality models and how to mitigate them



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

One of the things we've changed our mind about in the last few months is incrementality analyses based on media mix modeling.

You can look back at some previous episodes to see our initial skepticism – but now we do definitely believe that incrementality models based on MMMs is a huge part of marketing measurement, especially on iOS where measurement is fundamentally broken.

Yet in our own day to day use of these models, we've noticed that these are not silver bullets. These models are but one tool in a marketer's arsenal – so it's helpful to be mindful of the limitations of these models (even though we find these models to be enormously impactful).

In today's episode we'll talk about some of the practical challenges that we recommend marketers be wary of – as they implement MMM based incrementality models. We also recommend ways to mitigate some of these limitations below. Without further ado, here we go:

### 1. Correlation isn't (always) causation

If you start 3 different campaigns on Facebook, increase budgets on Snapchat, start testing a new channel, and it's Black Friday – and you see an incremental lift in your revenue or performance, it's hard to isolate which ones of these led to your revenue lift, and which ones did not.

Some models have techniques to estimate the individual contributions – but you still have to be careful about the fact that you don't conclusively know this.

The solution: intentional experimentation

How we recommend mitigating this is by being intentional about the 'experiments' you run – and the impact you measure from these. So: if you want to measure the impact of let's say a CPA campaign on Facebook, make sure you make a big or significant change in the CPA campaigns – and try not to change other variables in your marketing mix by too much.

## 2. Creative impact is hard to isolate.

Most models typically account for changes at campaign and channel level, and what this can sometimes mean is that creative changes aren't directly accounted for by these models. This is understandable because models find it hard to account for very granular changes (like at the creative level, where spends can be small compared to campaign or channel levels).

However because creative is a very very critical lever in impacting marketing performance, not measuring creative impact can be a huge handicap.

The solution: bake creative changes into experimentation cadence

As mentioned above, intentional experimentation is a big part of our approach. Because models don't naturally account for creatives, we make sure to bake creatives and creative changes into our experimentation.

Practically, here's what that looks like: if an early creative concept is showing promise in early testing, we set it up along with its variants in a new campaign, give it significant budgets and ensure we measure the incremental impact of this as a part of our experimentation cadence.

## 3. Platforms' learning phases can give muddy results

You might run an experiment with a new campaign, channel or optimization type that may eventually end up being hugely incremental. However because of the way the platforms operate, the campaigns need to accumulate enough signal before they start to perform and yield results. This is much more the case with Google UAC, to a lesser extent with Facebook ads – and certainly the case with many programmatic channels.

The solution: give experiments enough time to get platforms out of their learning phase.

What we make sure to do is give platforms at least a week after big changes to see the changes stabilize and result in some consistency of performance. This avoids the trap of your seeing poor performance out of the gate just because the platform is still stabilizing.

## 4. Results can be inconclusive

Sometimes we just see results that aren't clear wins or losses. You might see incremental installs but cannibalization in purchases as a result of starting a new campaign – and you might wonder if these were a result of it being a weekend or a holiday.

What's clear is that incrementality analysis is not a silver bullet. It isn't always going to give a clear cut signal in the way that deterministic IDFA based attribution used to (it's a different thing that deterministic attribution had a different set of problems) – so it's important to realize and be prepared for occasional ambiguous results.

The solution: use incrementality models alongside SKAN reporting

We typically review incrementality analyses alongside SKAN metrics. Because both provide one part of the picture, we try to combine the insights from both to inform our next steps. For instance, we sometimes see inconclusive incrementality but strong SKAN performance – or the other way around: and decide to double down on a channel or campaign; or 're-experiment' with it in our incrementality experiment cadence.

In summary, especially in the absence of identifiers, MMM based incrementality analyses are a huge step forward for measurement – but it's important to note that these aren't perfect, and that it's important to think through ways to mitigate their limitations.



## How monetization barriers can improve retention



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

We talked a few weeks ago about how there is a tradeoff between retention and monetization.

We looked at the example of a word game I worked on a few years ago – and saw how we reduced monetization barriers by making the daily puzzles free, and how that led to a huge boost in retention that more than made up for the monetization drop.

BUT as it turns out, that isn't always the case. One of the pieces of feedback we got from someone that worked on a leading match 3 game was that sometimes the opposite can happen.

For instance, a game in which users are not very highly invested won't retain very well. You could lower your monetization barriers to the point where there is almost no investment of time, effort or money by the users – and that can translate into very poor retention and engagement. As you can imagine, the retention from invested users can far outweigh the retention from non-invested users.

However, the moment a user makes one purchase, even if it's a small micro-transaction – it helps them get invested, so they can engage much more. Oftentimes it makes sense to add that level of 'good friction' to an onboarding flow to make sure that users are much more engaged – and much more likely to retain.

So – the takeaway is that the interplay between retention and monetization is nuanced – and very much dependent on the specifics of the game itself. Your mileage, as they say, may vary.

## 👏👏 How to build lasting partnerships with iTunes and Google Play app stores – with Jayvian Hong Head of Strategic Partnerships, Miniclip 🍹



Jayvian Hong  
Head of Strategic Partnerships, Miniclip

[Check out the entire episode](#)

### Looking beyond featuring requests

There were more collaborations beyond what I normally call “featuring requests”. That changes things in ways in which we work together. For us in particular, we don’t see either stores or any of the platforms that we work with simply as a user acquisition channel, we see them as a platform, from where we are able to get in touch with our users directly.

### Why does a USP matter while building relations?

Just because you have a Christmas update doesn’t mean you’re the only person doing a Christmas update, right? Everyone else is doing this. So what makes your Christmas update more unique and more special than somebody else’s? And this is where the USP stands out whether it’s more attractive to your players and engages your users more.

### When is the right time to notify app stores of a new launch?

I like to prep earlier, because it’s better for us and for them. It helps us to better align our target launch dates, what we’re trying to achieve, which countries we want to focus on. Obviously, launch dates could change as well. Nothing is carved in stone until it’s ready to go out. But you don’t want to plan too early in advance because you don’t want to say “Sorry, I have these changes and I can’t launch in time now” and that will be a nightmare. So I think it’s a balance between doing that and also being aware of when could be a suitable time.

## How the Play Store encouraged Jayvian's team to launch in India

It was also at a time where Google Play noticed that India was becoming one of their biggest markets. And so there were a lot of conversations and opportunities for us to start working together to explore and expand India as a new territory. This obviously goes beyond featuring because there were a lot of experiments that we ran, whether it's around pricing, new modes, content, players behavior, which we then shared with Play.

They also did a lot of research on payment channels, availability, offline marketing, which we wouldn't ever have done ourselves

## Partnerships can help expand businesses



India is just one territory. We were able to replicate this across multiple different territories. Brazil, MENA with both Apple and Google Play. Which is why I said these partnerships are very important for us because there is data that obviously we don't have access to where they are able to guide us as to do better in these markets to sell better.

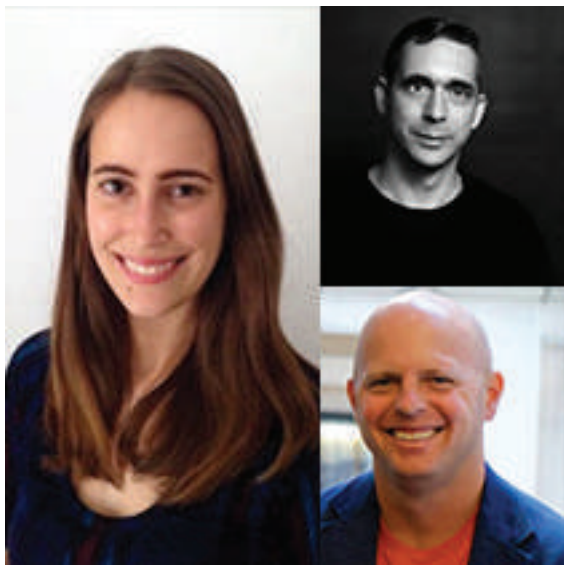
## The first steps to building long lasting partnerships

Before COVID we actually met some of our best contacts through conferences. It was really random, but we bumped into people who introduced us to people and made connections. And so I would say networking in the industry certainly doesn't harm anybody, specifically indie developers.

## What's the right note to start off a cold call?

I think the beginning is always hard for everyone. It depends on what you say, right? When you call and reach out. Do you explain who you are? Do you share some exciting things about your games? Do you tell people why they should pay attention to you?

 **The Mobile Growth Crystal Ball 2022: Predictions Part 1: Creative Automation (Danika Wilkinson, SocialPoint); Subscription Optimization (Andy Carvell, Phiture); an iOS Scandal (John Koetsier, Forbes)** 



Danika Wilkinson, SocialPoint  
Andy Carvell, Phiture  
John Koetsier, Forbes

[Check out the entire episode](#)

## Can AI breathe life into creatives?

**Danika Wilkinson:** At the end of the day, our audience is human and the way that they perceive and react to our creatives cannot be replicated by artificial intelligence. I believe that while we can use more advanced tools to tag, analyze and automate creative production, the emphasis when it comes to brainstorming and ideation still has to be very much human driven.

## The rise of hybrid growth and creative marketers

**Danika Wilkinson:** In 2022 we will see the emergence of user acquisition specialists who are more creative minded, and artists or creative directors who are more data driven, we will start to see more hybrid performance creative marketers becoming key to the success of games.

## The different touch points to reinforce an app's benefits

**Andy Carvell:** You want to be already pushing the benefits of subscription in your ads, really nailing that in your app store listing and your app store presence, deliver that in your onboarding experience and reinforce those in your paywall where you really want to then optimize for conversion based on this value prop.



## What does paywall optimization include

**Andy Carvell:** Adjacent to the idea of paywall optimization is the concept of price testing. So figuring out what users will pay, dynamic pricing – not offering the same price to all users but figuring out segments that will pay more or less and optimizing your overall LTV based on this will be critical.

## Is app tracking transparency a myth?

**John Koetsier:** We know that in 2021, ATT, iOS 14.5 came in – no tracking without permission and that explicitly included “no fingerprinting”. However, basically everybody continues to use it and Apple not only turned a blind eye to it, but is kind of in back-door conversations saying, “hey, that’s fine, we’re not too worried about it. Especially if only aggregated probabilistic information comes out.”

In other words, ATT, app tracking transparency is kind of a symbolic thing.

 **The Mobile Growth Crystal Ball 2022: Predictions Part 2: Homecoming of the creative process (Melissa Zeloof, ironSource); Newer UA sources in the gang (Natalia Drozd, Fabulous); Alternate payment methods (Jerome Turnbull, AppLovin)** 



Melissa Zeloof, ironSource  
Natalia Drozd, Fabulous  
Jerome Turnbull, AppLovin

[Check out the entire episode](#)

## UA automation brings creatives to the fore front

**Melissa Zeloof:** The more automated UA becomes, the more creatives become one of the key ways to get an edge with a campaign, especially interactive creatives.

## Sharing metrics in-house is more easier

**Melissa Zeloof:** An in-house creative team that's able to access all of the game's data, creates a more seamless feedback loop. Just make sure you're sharing all of your metrics internally. So what does this look like in practice? Let's say there's a level that's performing really well in your game. Seeing these end game metrics, your game designers can let the creative team know that this level is a fan favorite. And then your creative team highlights the level in their next set of ads.

## The execution of web to app flows



**Natalie Drozd:** In order to optimize, I believe that more and more people will try to create different web ways, either one pagers, or web funnels or full web products. And they'll use this subscription as the main one to surpass the extra fee.

## The Tik Tok strategy

**Natalie Drozd:** The main slogan of TikTok ads is to make TikTok, not ads. And what I really like about TikTok is that creative is the king, you don't have to showcase your product, you have to show a beautiful story that's engaging. So I believe it will make sense in 2022 to dedicate more time and effort to building your creative strategies not only on Facebook and Instagram, but also on other non-Facebook networks.

### How will developers look at alternate payment methods?

**Jerome Turnbull:** Mobile developers are going to invest more into alternative payment methods. They're going to incentivize their high value users to create accounts for this separate payment flow.

 **The Mobile Growth Crystal Ball 2022: Predictions Part 3: Retention marketing (Peggy Anne Salz, Mobile Groove); Play-to-earn gaming models (Keith Kawahata, AppLovin); Cross Promotions (Cameron Thom, Adikteev); Self-published games (Jon Hook, BoomHits)** 



Peggy Anne Salz, Mobile Groove  
Keith Kawahata, AppLovin  
Cameron Thom, Adikteev  
Jon Hook, BoomHits

[Check out the entire episode](#)

## Why retention makes more sense than acquiring

**Peggy Anne Salz:** If it's five times cheaper to retain users than to acquire new ones, then it makes sense to do what you can to keep users longer.

## Does the play to earn model look promising?

**Keith Kawahata:** As we saw in prior cycles, I would expect there to be several contenders fighting to be the backbone of the play-to-earn ecosystem, which is going to make it a highly fragmented start, but that'll likely consolidate and standardize over time.

## The rising popularity of NFTs

**Keith Kawahata:** I think that there was around \$2 billion of volume on NFT's in the first couple months of 2021 alone, which was like a 2,000% increase from the fourth quarter of 2020. I would expect that volume increase and audience increase to be propelled by gaming and to propel the whole ecosystem into the mainstream in 2022.



## Segmenting by user behavior to eliminate a negative impact

**Cameron Thom:** If you do care who sees ads and monetize over longer periods of time with purchases, you don't want to risk alienating that user and need to limit that risk through segmenting by user behavior, ad format, and position in the waterfall to be more thoughtful in your approach. An example is users who play a ton, but rarely make purchases. Not much risk there. But still, you're purchasing your own inventory with your competition and trying to limit risk through resource intensive studies on audiences and behaviors to minimize negative impact.

## Making use of data science to predict user behavior

**Cameron Thom:** We see advancements in diagnosing and predicting user behavior, with data science making growth teams more accurate and pinpointing an action which each user will do and when they'll do it. This creates the opportunity to further pinpoint the next app that the user is most likely to appreciate, within your portfolio, potentially even across genres.

## The impact of ATT on hypercasual ads

**Jon Hook:** We've seen crazy CPIs on Facebook, iOS, and Android. So more people are trying to test on Tik Tok and try to find new ways to go. But I think we're seeing a lot of hypercasual studios realize that if you break free from the publishing model, and actually focus on games with more LTV, it gives you the freedom to create a different kind of game.

## The possible safety nets for hypercasual games

**Jon Hook:** I think the rise of play-to-earn blockchain games is now really interesting, particularly for hypercasual developers or studios that can build games with a bit more matter to them. The way I'm seeing these private token sales and NFT drops, it's a way – if you've got a really neat idea, and you can execute well, there have been a few examples recently, you can raise 1 to \$3 million very quickly.



# **UA CHANNELS**

## How to win with Apple Search Ads in a post-ATT world – with Thomas Petit, Growth Consultant



Thomas Petit,  
Growth Consultant

[Check out the entire episode](#)

## How Apple defines tracking

In Apple's vocabulary, we're not tracking these users, we're measuring the performance of a campaign, because what Apple defines as tracking is mixing information from your company with another company. So, if a campaign comes from the Facebook app, or the YouTube app, another gaming app, or whatever app that has some ads in it, you're tracking when you're measuring between apps. And here, what's very peculiar with Apple Search Ads is you're measuring with an OS app, with this operating system app. This is not considered by Apple as tracking, because you're not crossing data with any other app.

## The mechanics of attribution under the Ad Services framework

When a new user goes to open the app for the first time, the measurement framework basically pings an Apple server and says, "oh, I've got this new user, does he come from one of my ASA campaigns or not?" So, sometimes the payload will come back empty, like, "nope, didn't come from any of your campaigns". Sometimes the payload will come with a lot of details like "oh yeah, it was that campaign and blah, blah, and blah, blah." And this payload is actually pretty granular in the sense that you can get keyword level data, plus all the creative performance. From that moment you can assign, like, "that user who just opened the app comes from that campaign"

## The ideal ad group structure within campaigns

So once you decide, maybe you work on ad groups, you've got a high LTV keyword, a medium LTV keyword and a low LTV keyword, and these are your three ad groups. What I would have recommended is to have each of these three ad groups move into three, I call them concepts. Like, each keyword block would be moved into three ad groups that have the same keyword within, but different targeting based on is this user: a new user LAT-off, returning user LAT-off or anyone.

## Where the search tab placement could actually work

I've seen a few advertisers that told me like, "Oh, yeah, it looks dreadful. But actually, on some segments of returning users, it's either very important for us strategically, or it actually brings decent metrics." And that shows to what extent returning users can really vary from new users. And if you would never have split, between new and returning in this way, you would never have seen that maybe in the search tab that works.

## The cost of not targeting the 'open' group

If you only target new and returning, you need 18+, you're going to leave on the table all these users: ads Personalization, under-age, and the bizarre other edge cases like educational devices.

## Why ASA is hard to scale

A lot of people were already maxing out what they can get on Search Ads, and it's a search inventory. It's not like a feed where you can put the ads to anyone, if somebody is not looking for something relevant for you. Even if you managed to show your ads to them, it's not going to produce much of an impact. And so, I never thought it was really possible to shift your Google and Facebook budget onto Apple. And, what I've seen over the last two months or three months since SKAd Network is ramping up is that actually the inventory prices haven't changed much. And I think this is the signal that this budget shift didn't really happen.

## The difference between Google search and Apple search

When you look at a search on google.com or google dot, whatever, the searches are a lot more, longtail. And there's a lot more of it. So actually, I would even say, it's easier to scale up your spend on Google Search alone. And then you've got Display and YouTube and whatnot. With Apple Search Ads, you don't have this extra inventory. But even on the search itself, you're already more limited by the nature of the inventory. And the fact that it's just this pool of people looking. The search behavior is really different in an app store than it is on a browser. And that limits a lot.

## Much-awaited changes to Facebook's Automated App Ads (AAA) campaigns: audience exclusion, age targeting, city targeting 🧀



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

We've talked about some of the challenges with Facebook's AAA campaigns before.

[5 reasons why Facebook's Automated App Ads aren't ready for prime time yet](#)

[How to win with Facebook's Automated App Ads\(AAA\) – with Gina Kwong\(Senior UA Manager at EA\)](#)

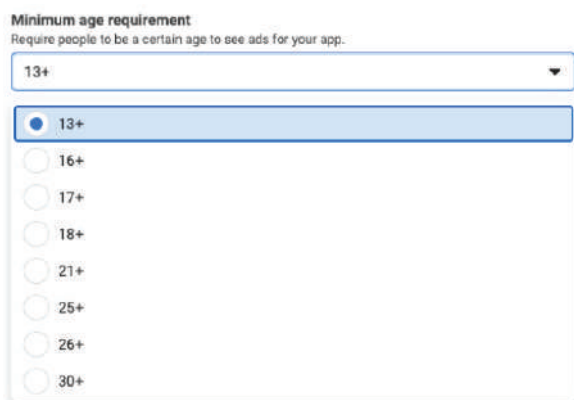
The TLDR of those episodes was that while AAA can be hugely powerful, they also have had some critical limitations on account of the lack of control they offer to advertisers. In fact, even in our second episode with Gina Kwong about how to win with AAA, she acknowledges that the lack of control can be a serious challenge while managing risk.

Well, a lot of that is changing. Facebook is rolling out some much awaited features that should mitigate at least some of the risks with Automated App Ads (AAA). Here are these 3 changes that we spotted in the wild:

### 1. You can exclude users of specific age groups.

This frankly is a huge deal – a number of apps that we work with found that AAA campaigns used to give users under 18, and there was no way to exclude them. Now, if your older users are more likely to monetize, you can just target them.

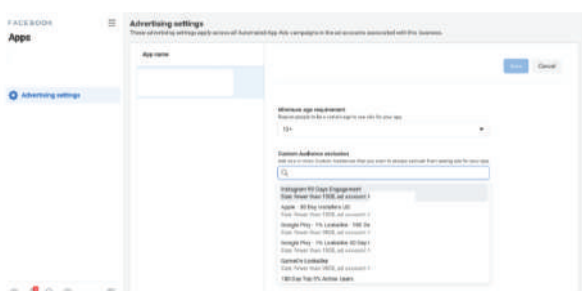
Again, to be clear, the functionality is somewhat limited – as you'll see from the screenshot below – so while you can target users over 30, you can't target users between 35 and 45; or users over 40. But this is still huge progress over what was happening before.



## 2. You can exclude custom audiences.

Again: a huge deal in addressing a very common frustration with the earlier AAA campaigns – that they used to give new and existing users; and there was no way to exclude existing users in campaigns; often-times AAA campaigns would give a lot of users who had already installed apps – and that was frustrating.

Now with custom audience exclusion, you can exclude everyone that's opened the app in the last 180 days or so, or all installers, and all purchasers.



## 3. You can geotarget specific states and cities within countries.

Another common frustration was that AAA campaigns only allowed targeting at the country level – not at the state or city level. For many verticals we've worked with, such as dating or food delivery, that was incredibly frustrating – and rendered AAA practically unusable. Now Facebook does allow us to target cities and states – which is a huge huge relief for advertisers.

For what it's worth, this feature is mentioned in Facebook's documentation – but we do not see an option to select this in our accounts yet. But since this has been publicly announced, we do expect this to be available soon.

What about iOS 14 or ATT? The good news is that the first and third (age and local targeting) are based on Facebook's first party data – and aren't impacted by ATT or iOS 14. Custom audience exclusion is going to be impacted by ATT – so this is going to make a bigger difference on Android than on iOS.

How do you make these changes? Go into your Business Manager -> Apps -> Advertising Settings -> Edit

You should see options for selecting the age range and custom audience exclusions in there – and hopefully you should see city/-geo exclusions soon too.

## How native ad flows with landing pages articles win out over direct to app store flows – with Violeta Pirnog, Senior Performance Marketing Manager at Blinkist



Violeta Pirnog,  
Senior Performance Marketing Manager  
at Blinkist

[Check out the entire episode](#)

## Ads for the Soft Sell

What's also interesting is that only around half of the people who are being served these kinds of ads know that they're being served ads. And of those, only half are skeptical. While the other ones are actually fine with it. So, it's essentially a soft sell of your product.

## Placing ads in the News Feed

On Facebook the placement that works the best is one that looks, quote unquote, native, where you don't usually find the usual ads or ad placements. The news feed placement is actually the one that works the best. I think that's because it can be mistaken for a post that someone may do like a brand made that is organic.

## Catchy Titles for Strong Articles

The main piece of creative here is the article. And then, testing out different images and titles to go with it. Because the title and the copy and the combination of title and images are what gives you the CTR. And you first have to reach a certain CTR. Obviously, it's always good to have a high CTR in order to send them to the articles. So, I would first start with a strong article and then test out different images and titles.

## Reuse Creatives Across Platforms

As we were testing a lot of different articles on all of the platforms, we realized that it's the same ones that work for Outbrain, Taboola, and Facebook.

### The Human Gaze

One thing that is surprising is that images of people usually work the best. I think there's some psychology around it. And it's also within angle. So it's the front angle where maybe you don't necessarily want someone staring right back at you. But you can see the eyes. I think I remember reading something, probably on LinkedIn, about the psychology of this, where instantly, just because of the way that we're built, whenever we encounter another pair of eyes – even if we're scrolling on Instagram – we're just instantly attracted to it as humans.



## How to scale non-gaming audiences for games via influencers – with Nahir Garcia, Influencer Director at Etermax & Adsmood.com ✨



Nahir Garcia,  
Influencer Director at Etermax

[Check out the entire episode](#)

### How to make the most of an influencer relationship

We send them a brief with our brand guidelines, the tracking link we use and the hashtag we need, but the most important thing for us is to take care of the influencers' audience and that our message is as relevant as possible for them. Basically, we work together to decide what would be the best communication and the best method to promote our titles. We try to provide them with some tools such as promotions or exclusive benefits for their followers only.

### Consistency is key

Our main goal is to have at least a post a day, which will allow us to build a sustainable brand over time.

### How to evaluate success of influencer partnerships

We have engagement, number of views, cost per view, how long it takes from posting until it is exposed to a major audience. We have all that information which can be measured and we use it to go through iterations, keeping the elements that we believe work and changing others. It can be the music, the hashtags, the length of the video, and of course, the creative content.

## The element of surprise humour is always successful

I remember Adam Payne, where the influencer answered a rather wrong question. And someone stuffed a tart in his face. And it was really funny, and it worked very well. Humor always works.

## It is important to course correct based on validated data

For example, we believed that lifestyle would be a good category, because we understood that the audience could work with our product. But to our surprise, this turned out to be the worst campaign. And, of course, the lesson was really useful. But again, the learning process is most important here.



## Why you shouldn't diversify your user acquisition mix early on



Shamanth Rao,  
CEO & Founder at Rocketship HQ

[Check out the entire episode](#)

I've seen this stated at times – that developers should diversify their user acquisition channel mix. Investing is given as an analogy – the argument is made that a diversified portfolio is safer than one that isn't.

While the analogy and the advice can make sense for "some" app developers – this advice unfortunately isn't universally applicable, and I do think app developers can get burnt if they follow this without understanding their own specific context.

I'd say this advice to diversify isn't applicable to the vast majority of app developers that operate with small or midsize budgets, which I'd say is under ~\$100k a month range.

I can speak to this very clearly because we work with and advise app developers at different levels of scale – some under \$50k a month, some between \$50k and \$100k, and some well north of \$100k. After having seen up close over a 100 products at different levels of scale, here is what we recommend around diversification.

Focus on SANs at low scale (<\$50k/month)

And the #1 piece of advice I give to app developers spending under \$50k a month is to NOT diversify their acquisition mix. I typically recommend they spend as much as possible on Facebook – and not worry about diversifying their channel mix at this stage.

If the product has a strong resonance with Snap and TikTok, we might spend some budgets here. If the Android product is stronger, we might spend some budgets on UAC and Android (but not on UAC iOS at this level of scale). For products with a strong fit with Apple Search we might spend some budgets there.

But broadly, we never recommend running over 2 or 3 channels – or running outside of self-attributing networks if you're spending under \$50k a month.

Concentrate your channel mix to ensure algorithms have enough signal to perform  
What also reinforces our thinking around concentrating your spend when at small budgets is that SAN algorithms actually struggle to perform if your budgets are way too small.

Let's say you have a \$20k a month budget, a CPA of ~\$80 – and you spread it across 4 channels. You then have about 250 conversions a month overall, or ~62 conversions per channel per month or about 2 conversions per channel per day.

2 conversions per channel per day just doesn't give enough signal for your channels to learn and deliver performance – so all of your channels would actually perform worse than one single concentrated channel that would deliver perhaps 8 conversions per day, learn faster, and deliver better results.

Contextual advantages of ad networks are hard to realize at small scale.

What happens if you're spending between \$50k and \$100k a month? I'd recommend still staying within self-attributing networks – and trying to scale within your self-attributing networks. We do not recommend advertising on ad networks or DSPs even at this stage.

Yes, the contextual affinity of ad network traffic has a chance of working well for games. If you're advertising for a game, an ad network can show your ads within games – and in theory it can appear that it could make sense to advertise within games via ad network traffic earlier on.

But this contextual affinity of ad network traffic typically isn't enough to drive performance that is on par with SANs unless you optimize ad network traffic heavily – by culling underperforming inventory and boosting performant inventory, either manually or via algorithms. And given that the ad network traffic or DSP traffic can be a bit of a haystack in which you have to find needles, this can take budgets and time for learnings to be unlocked.

Diversify \*only\* after you tap out SAN traffic  
But yes, there is a time and place for ad network traffic and DSP traffic – and this is typically when you want to scale – and have tapped out SAN traffic.

A good rule of thumb for when this typically happens is when a product hits about ~\$100k in spend – and is spending across the key SAN channels.

This is when it makes sense to look outside of the walled gardens. If you're at over \$100k a month in spend, and your SANs are at enough scale, it means you are able to spend time, effort and budgets in optimizing your ad network or DSP traffic – manually or via algorithms. And if these channels don't work out (as can often happen), the hit to your overall metrics isn't as hard.

Plus: at these sorts of budgets, you have enough signal within each of your channels (number of purchases or in-app events) that the channel algorithms are able to learn and optimize without requiring a lot of time – or budgets relative to your overall budgets.

And if these channels do work out, you're able to unlock a massive amount of inventory that you wouldn't have otherwise had access to via SANs alone. Unlocking this can let you scale faster – and let you go from 6 to 7 figures in spend.

In summary, diversification can absolutely help you scale – but this is not for everyone, and not at all stages of an app's scale. We'd recommend a strategy of staying concentrated in your key channels at small spend – and diversifying as you

## 💔 How to break up with Facebook: the opportunities and challenges of an unusual acquisition channel mix – with Trang Dao, VP of Growth at Atom Finance 🏛️



Trang Dao,  
VP of Growth at Atom Finance

[Check out the entire episode](#)

## How to find channel alternatives for your acquisition mix

Diversifying from Facebook means that you should just look at the channels that have similar structure and advantages as Facebook. Like, channels that have a lot of eyeballs, channels that have a lot of first party audience data, channels that have built really good native digital ad experiences. That tends to mean that you should look to Google and Amazon first.

## The way to approach affiliate marketing program

Affiliate programs and CPA programs do take a little while to ramp up because it is a manpower intensive channel. You do have to build relationships with partners, and you have to convince them to work with you and that sort of thing. It's really no different than negotiating any sort of business deal.

## There is a ramping up process to onboarding partners

We started out with offering quite favorable payout terms that we would be able to revisit and renegotiate once we were able to prove that we could drive revenue to these partners, and prove that the product that we were offering was something that their users would connect with instantly.

## It is surprisingly easy to run CPA payout ad networks

For us, it was really easy to turn on these CPA payout mobile ad networks just because that inventory is there and you just need to be uploading your asset, and then having it run, and making sure that you're connected through your MMP or whatever.

## There is initial effort required for affiliate marketing

More affiliate websites took time in back and forth, and negotiation. Because that involves content development, training, providing workflow walkthroughs of how the product is being used, and how we can get that particular publisher to speak about the product in a way that resonates with their audience. That's something that can take a few weeks, maybe a couple of months.

## Why commission-based traffic has functioning fraud shields

Commission-based traffic inherently comes with built-in fraud shields, because by definition, partners are paid out only on genuine sales or conversions. So when we set up our contracts, we do make sure that we have fraud reversal rights in our terms, and those are usually pretty standard. And because of that, since the publishers know they won't get paid for fraudulent traffic, they have this level of accountability that disincentivizes them to send us fraud traffic.

## How to win with Facebook AAA (Automated App Ads) campaigns – with Gina Kwong, Senior UA Manager at Electronic Arts (EA)



Gina Kwong,  
Senior UA Manager at Electronic Arts (EA)

[Check out the entire episode](#)

### AAA can succeed where others don't

I was working on a title that had not been successful, on the lot of lookalike audiences. And so this product felt like a very fast and efficient way in testing an audience. And yes, I was one of the first marketers to test in it, when it was still in its beta. And it was really exciting, because we went from really spending a very low daily budget to tens of thousands a day, and we saw really good results.

### It is possible to optimize creatives

You have to rely on the Facebook UA data to optimize creatives. What I did was, I used the UI to optimize based on the relative performance; not necessarily its true performance.

### Less is sometimes more

While it's nice to have all of these creatives in there and max it out to 50, I actually have seen that having more creatives could potentially lower the performance of your campaign. Because Facebook is trying to actively test the new or different creatives that are in the campaign, with the caveat that, of course, they'll still serve your highest performing creative.

### The process of gauging creatives

I see 20 to 25 being the most optimal number of creatives. And you refresh those, as soon as you see one or two weeks where they're just not spending, it's time to pause them and add in new creatives.

## It is important to be judicious

I have definitely seen titles that have been run by my teammates on other titles that have basically all the campaigns on AAA via value optimization. And you're right: that makes me very nervous, when you see one type of test because anytime there's a bug, when you see issues, which we've definitely seen before.

## Assess effectiveness over a longer period

There will be days where you're like: "Well, it's spending a couple thousand dollars, and I'm not getting any payers. What should I do?" That will happen. You have to look at your average costs across a certain period of time that makes the most sense for your product and see if that is better than your lookalike campaigns already.

## Always test everything

A lot of times your highest spending creative may not have the highest conversion because Facebook just stopped serving the other ones. So in comparison, they could have a lot higher IPM, but maybe a 10th of the spend. So understand what your objectives are and keep testing, there's really no magic formula for all of it.

## How to ensure you get all opportunities

I learned this from one of my directors: he taught me that you want to start with the most broad and then you hone into the most narrow. Because if you start the other way around, there's nowhere to go if it doesn't work.

## The name of the game

It's a running joke: it will always spend your budget, it's up to you to figure out if it is effective.



---

## Conclusion

Thank you for taking the time to read this book.

We hope the insights offered in this book have helped you take another step forward in your journey. We also hope that you revisit this book from time to time to strengthen your strategies.

We would love to hear from you about any feedback you have for us - please drop us a note at [hi@rocketshiphq.com](mailto:hi@rocketshiphq.com)